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23 April 1985

# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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23 April 1985

**EAST EUROPE REPORT  
ECONOMIC AND INDUSTRIAL AFFAIRS**

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BULGARIA

SHIJIE JINGJI DAOBAO ON ECONOMIC REFORM IN BULGARIA

HK280740 Shanghai SHIJIE JINGJI DAOBAO in Chinese 18 Mar 85 p 4

[Article by Cao Ying [2580 5391]: "How Bulgaria Achieves the State's Overall Interests in Reform"]

[Text] Reform has been carried out and repeated explorations have been made in Bulgaria since the 1960's when a new leading system was adopted in its national economy. At present, new economic methods and new economic mechanisms are being practiced in this country. Since 1981 Bulgaria has in theory clarified the position of the state as the owner of the property of the whole people and that of the working collectives as direct operators of this property. According to that, what the state has to do is just to perform the function of the owner through enacting economic legislation and setting standard economic quotas to ensure the basic proportions and necessary growth rate of the national economy, rather than engaging in the direct management of the property of the whole people, as was done in the past. Those who engage in direct operations are the working collectives in enterprises, such as workshops, sections, and work teams. The enterprises fulfill the tasks assigned by the state, in accordance with a few mandatory quotas such as the sales volume of their main products, the total profits, and monetary incomes, and conduct economic accounting based on the system of assuming sole responsibility for their own profits and losses.

According to the new economic methods, while expanding the power, duties and responsibilities of the enterprises, the objective economic laws, including the law of value, the relations between commodity and money, and the role of the economic levers should be used to eliminate the abuses resulting from the excessive administrative orders of the previous system.

The purpose of expanding the power of the enterprises and replacing the method of giving administrative orders with economic methods is to correctly handle the relations between owner and operators and to better harmonize the interests of the state, the collective, and the individual. However, under such conditions, it is still necessary to pay attention to the negative influence of the law of value, the relations between commodities and money, and the economic levers, and prevent the overdevelopment of decentralization.

But we must not give up eating for fear of choking. In theory, it is entirely possible that contradictions may occur between the owner and operators. In practice, it also often happens that the interests of the collective and the individual do not conform to those of the state and the whole. The state may possibly infringe upon the interests of the collective or the individual, and the latter may also possibly infringe upon the overall interests of the former. While paying attention to harmonizing the interests of the state, the collective, and the individual, Bulgaria has emphasized guaranteeing the interests of the state. Although there may be contradictions between the three, it is necessary to declare once again that they are not antagonistic under socialism. Fundamentally speaking, the interests of the three coincide.

In order to guarantee the interests of the state, under the conditions that the power of the working collectives is expanded in accordance with the theory of the owner and operators, Bulgaria has worked out a series of regulations, stipulating that after the power of the working collectives is expanded, the power of the directors and managers must not be weakened and their prestige must not be lowered. Being representatives of the state, they represent the will of the owner and their duty is to safeguard the interests of the state and society and to implement the policies of the state. The position, role, and duties of enterprise leaders are not lowered, weakened, or lessened when the democratic rights are enhanced in the enterprises and competition is carried out among the leaders. They must combine the interests of the state with those of the collectives and give appropriate consideration to those of the individual so that the relations between the three can be correctly handled.

During the reform of the economic structure, which is being carried out in various East European countries, since the power of the enterprises has been expanded (this is entirely necessary), there have also been some contradictions between the interests of the enterprises and their working collectives and those of the individuals when dealing with the proportion between accumulation and consumption and handling the relations between the interests of the whole and those of the part. As a result, the overall interests of the state have been infringed upon. Over the past few years similar things have also occurred in our country during the effective reform of the economic structure. This is a problem that merits our serious attention. It is necessary to design and adopt a certain mechanism in our economic structure so as to prevent such things from being repeated in the future. Bulgaria is solving such problems by adopting effective measures and strengthening theoretical and educational work.

CSO: 4006/519

BULGARIA

SHORTAGE OF OFFICE EQUIPMENT, SUPPLIES DEPLORED

Sofia POGLED in Bulgarian 25 Feb 85 p 5

/Article by Rumen Dimitrov, sociologist: "This Menial Desk Work"/

/Text/ Menial and uninspiring though it may be, "desk work" plays a part in even the most creative intellectual activities. At first glance, the material needs of mental labor appear insignificant, and, in comparison with the fruit of that labor, they are certainly small. But only at first glance. Because in the "material civilization of mental labor" the greatest effect is achieved with the smallest resources.

I shall start a list to which items may be added quite arbitrarily. At the head of the list, I would put the condition of photocopying services for written and graphic materials. Clearly these services are insufficient; moreover, access to them is hampered. As a result, the few machines that are available do not work at fully capacity. For example, at our main library, the Cyril and Methodius National Library, where daily photocopying needs are enormous and particularly pressing, the photocopier is out of order for months on end. But even if it happens to be working, the reader is allowed to make only 15 (fifteen!) copies a day. What criteria were used to set this limit, bearing in mind that one reader might need 7 copies, another 17 and yet another 77?

Other town libraries do not provide such services. But in those offices that do have photocopiers, things are no better. Again there are limits, of the order of 30 to 50 pages a month, and then, naturally, only for authorized personnel. So the reader or the general public can scarcely copy even one page of a book borrowed for shorter-term use. Such limitations are further legitimized by myths concerning various imposed bans.

Any book may be copied, except in its entirety, if the copy is to be used exclusively for personal needs. Economics provide a more serious argument: the materials used in photocopying are expensive, especially the chemicals. The use of reproductive technology remains economically unprofitable, not in spite of the existing organization of these services but precisely because of them. The system produces the following absurdity: when a scientist is unable to use the photocopying services in his own department he is obliged to seek anonymous help in another department. Money passes from hand to pocket without scruples. Of course, the state foots the bill. So one department takes an illegal route to provide for another what it can't provide for itself. And the losses are multiplying.

All this could be avoided with the introduction of a simple economic law-- everyone pays for the photocopying services within his department. In this way, democratic access is assured and everyone will think twice about what to order and what not to order. Moreover, the service will become more profitable. Obviously organization is the solution because demand is constantly increasing.

However, the center of this type of service has to remain where the books are, in the libraries. As just one example, I would like to mention the system at the Deutsche Bucherei library in Leipzig. The customer fills out a form giving his name, the title of the book and exact instructions as to the pages he wishes to be copied (as long as it is not the whole book). After payment, in 1 or 2 weeks he can pick up microfilms, photoplates, photocopies, etc., either at the library or at his post office. This is a case of the library serving the reader, and not the reverse.

You are likely to come up against similar bureaucratic obstacles just about everywhere. For example, aids for erasing typographical errors, like "typ-ex" or "kor-ex," are not produced here and have long since not been imported. But a typewriter needs them, like a pencil needs an eraser. And talking of erasers, supplies of lead for ordinary mechanical pencils are worse than sporadic. Those with finer lead (do you remember the beautiful Soviet sets?), which are particularly suitable for sketching, working on print and making notes in book margins, have not been seen here for a decade or more. And when was the last time you saw fine quality typewriting paper at the stationers'?

How are we supposed to use fluorescent pencils (OK, markers) when the lines they draw are too narrow and too opaque to illuminate the printed lines as they should yet, at the same time, too thick to underline in the old way?

Why did the business world suddenly decide some time ago that Bulgarians no longer write with pen and ink? Why don't the stationers sell different standard-size pieces of cardboard for card indexes and even the small index boxes for students' personal catalogues?

Why, for more than 10 years now, haven't we produced and sold file classifiers with little dividers which have been replaced by file folders like the KM-30, which are hard to find and even more unsuitable for the normal user?

And when shall we ever see in our stores the type of furniture that is suitable for the man who works with his brain? There are functional lamps, ergonomically designed charts, various office fittings, customized desk boards for specific tasks and special shelf sections for books, folders and writing accessories in the work corner or study.

I truly believe that the talented ideas of the Bulgarians undoubtedly deserve better material and technical support. All these questions crystallize into one: isn't it time that a way be found to react in a definite and timely manner to the humble yet essential material and technical needs of the people who work with their brain?

12907  
CSO: 2200/124

BULGARIA

READERS' LETTERS, QUESTIONS ANSWERED

Income, Property Tax Deadlines

Sofia KOOPERATIVNO SELO in Bulgarian 9 Jan 85 p 2

/Explanation from the Ministry of Finance: "Observe the Deadlines: Regulations for Payment of Taxes and Fees for 1985"/

/Text/ From the village of Pavelsko, near Smolen, Ivan Krivoshiev asks: With the approach of every new year we the people must pay a number of taxes and fees. I should like to ask what time limits are set for us to settle our debts with the state, which taxes and fees are reduced if one pays during January or during the first quarter, at what point interest is charged, etc.

In response to Comrade I. Krivoshiev's question, which has been raised by other readers, the Department of Taxes and Fees on the Population at the Ministry of Finance has provided the following explanation.

In accordance with the Law on the General Income Tax and instructions for its enforcement, furnished by the Ministry of Finance, between 15 and 30 December each year every household must declare its income from the exercise of private trade or business activities, rent, private teaching engagements, sale of agricultural produce, etc. Declarations must also be made by persons with earned income according to the terms and conditions of Council of Ministers Decree No 11, 1982, concerning the establishment of a system of self-sufficiency for populations living in districts and villages where produce is fundamentally agricultural. The right to tax relief, as stipulated in Art 37 of the same decree, is assessed by the tax office. Further, declarations must also be made by persons who, throughout the year, provide isolated services which, according to Art 41 of the Law on the General Income tax, are assessed in advance at a rate of 10 percent.

According to Art 58 of the Law on the General Income Tax, tax is calculated on an increasing scale:

--at 10 percent if the declaration is made within 30 days of the stipulated deadline, i.e., up to the end of January of the following year;

--at 50 percent if the declaration is made after the expiration of this 30-day deadline;

--at 100 percent increase for income from a concealed source of revenue.

It should be clear that those citizens who have not been in a position to make the required declaration should do so as soon as possible in order to avoid the penalties which increase with every passing month, even day.

The Law on Local Taxes and Fees stipulates deadlines for payment of certain taxes and fees. Property tax and income tax are due in four equal payments on 31 March, 30 June, 30 September and 30 November in the year under review. Those who prepay their taxes for the full year by 31 March receive a five percent reduction on the amount owed.

The fee for refuse collection is due from property owners when property taxes are paid.

Vehicle registration fees are determined annually and must be paid at the latest by 31 March of the current year. For vehicles acquired after that date, fees are paid monthly following the purchase. For vehicles purchased during the second half of the year, fees are paid at half-rate. This also applies to fees for registration of motor vehicles equipped to run on butane.

Those taxes and fees that are not paid by the stipulated deadline are assessed interest for late payment at a rate of 0.05 percent for every day that they are overdue, computed on the proportion of taxes or fees still owed.

#### Firing People From Jobs

Sofia NARODNA ARMIYA in Bulgarian 9 Jan 85 p 2

/Answer from Peter Kolev, attorney, colonel in the Reserves: "Advice from NARODNA ARMIYA--Is It Possible To Dismiss Someone for Breach of Discipline?"/

/Text/ /Question/ An uncertified employee, appointed as chief of the depot in his unit, commits flagrant errors in distributing and accounting for materials, fails to maintain them in good condition, fails to meet deadlines for rejects, etc. Can he be dismissed for breach of discipline? This question is asked by Officer Stoyko Topalov.

/Answer/ Under the conditions of the Labor Code, dismissal of workers and employees for breach of discipline is admissible in law and possible in cases of very severe violations of labor discipline. One such violation, resulting from the labor contract, is provided for in Art 129, Sec "f" of the Labor Code, and expressed as "failure to perform or gross negligence in the performance of duty." However, that alone is insufficient. The individual must be found guilty of the violation. Guilt is established when the worker or employee is qualified

to perform the work assigned to him but fails to perform it or performs it with gross negligence for no good reason or due to reprehensible conduct.

It is possible that failure to perform or gross negligence in the performance of official duties is not due to the guilty conduct of the worker or employee but rather to certain other objective reasons, for example: lack of the necessary qualifications to perform the duty, insufficient physical or mental capacity or strength, etc. In such a case, violation of official duties is not at cause. For even with the utmost desire and endeavor the employee will not be equal to the work and will not achieve the work goals that have been set. This objective inability to perform an assigned job designates the worker or employee as "unfit" for duty or for the task assigned. In this situation, if dismissal is imperative, it must be arranged according to Art 30, Sec "c," of the Labor Code, that is, "unfit for assigned duty," and not for breach of discipline.

#### Armed Forces, People's Army Compared

Sofia NARODNA ARMIYA in Bulgarian 9 Jan 85 p 2

/Answer From Peter Kolev, attorney, colonel in the Reserves: "The Difference Between Armed Forces and People's Army"/

/Text/ /Question/ In the mass media and even in the military glossary sometimes one reads "armed forces" and sometimes "people's army." Is there a difference between these two concepts? The question is asked by Todor Strezov from Vidin.

/Answer/ There is a difference. And this difference is established by the legislature in Arts 3 to 6 of the Law on Universal Military Service of the People's Republic of Bulgaria. According to the text of the law, the Armed Forces of the People's Republic of Bulgaria comprise the People's Army and the Forces of the Ministry of Internal Affairs. The People's Army is organized under the Ministry of National Defense, and its immediate direction is assigned by law to the Ministry of National Defense.

The Forces of the Ministry of Internal Affairs may be created in times of special need and upon the decision of the Council of Ministers. When such forces are created and deployed (for example, the Border Guards) they are included in the structure of the Armed Forces.

From this legal definition, it follows that certain other troops are not included in the same structure with the Armed Forces, although they have certain external features in common, for example, the national militia and the corps of engineers. With the aim of creating maximum unity in the organization, life, training and education of the Armed Forces, Art 8 of the Law on Universal Military Service stipulates that a number of basic regulations for the Armed Forces (disciplinary regulations, interior garrison and guard duty regulations, etc.) are established and issued by the Ministry of National Defense, but are also binding on the Forces of the Ministry of Internal Affairs.

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CZECHOSLOVAKIA

JANUARY 1985 ECONOMIC RESULTS SUMMARIZED

Prague HOSPODARSKE NOVINY in Czech No 8, 1985 p 2

[Commentary by Engineers Marie Hormannova and Alena Polakova, Federal Statistical Office: "January 1985"]

[Text] As was to be expected, the exceptionally cold weather in January left its imprint also on the overall economic results for the month, especially in construction and public freight transportation, and there were also greater demands on heat and power generation.

At the same number of workdays as in January of last year, the growth of the principal indicators fell short of the state plan's targets for the entire year.

Industry's gross output in January was 56.5 billion korunas, 2.2 percent more than in January of last year, but the annual state plan called for a growth rate of 3.0 percent. Thus the shortfall in January amounts to 437 million korunas, the equivalent of the output during a fifth of a day.

Overall fulfillment of the economic plans was 98.4 percent. There were shortfalls in the fulfillment of the January production plan at 336 industrial enterprises, nearly two-fifths of their total number. At the same time, the economic production plans for January were exceeded overall at the enterprises of the food industry, in heat and power generation, in coal mining, in the clothing industry, the leatherworking, shoe and fur industry, and the rubber industry. In January, for example, heat and power generation increased by 7.7 percent; output in the clothing industry, by 4.3 percent; in the rubber industry, by 2.8 percent; and in the food industry, by 2.5 percent. The enterprises in the electrotechnical industry, heavy engineering and general engineering also achieved above-average growth rates of their production in January. But the production volume of the engineering enterprises during the month in question was lower than what the January economic plans had called for.

The output of electricity in January was 7,868 million kWh. In the present exceptional period, many industrial enterprises are using their own, enterprise or plant, sources of power supply. In coal mining, the January economic plan was exceeded by 0.1 percent for bituminous coal, and by 0.2 percent for lignite, but there were problems especially in transporting the coal. The January

**Basic Indicators of National Economy's Development in January 1985.  
Increases Over Comparable 1984 Period (in percent)**

	<u>Jan</u>	<u>State plan<sup>1</sup></u>
<b>Centrally Administered Industries</b>		
deliveries for:		
- investments, at wholesale prices	12.0	.
- domestic trade		
at wholesale prices	3.1	.
at retail prices	-2.5	.
- export to socialist countries		
at wholesale prices	-6.4	.
at f.o.b. prices	-3.6	.
- export to nonsocialist countries		
at wholesale prices	0.0	.
at f.o.b. prices	-3.4	.
- other sales for productive consumption		
and operations, at wholesale prices	-0.6	.
volume of industrial gross output	2.2	3.0
average number of employees	0.7	0.5
labor productivity based on gross output	1.5	2.5
<b>Construction</b>		
construction work performed with own personnel	-20.2	0.9
average number of employees	0.2	0.3
labor productivity on construction's basic output	-20.3	0.6
housing units delivered by contracting enterprises	24.6	27.7
<b>Procurement</b>		
slaughter animals (including poultry)	1.5	-1.1 <sup>2</sup>
milk	-1.7	-2.1 <sup>2</sup>
eggs	6.7	-6.4 <sup>2</sup>
<b>Retail Turnover</b>		
main trade systems	4.8	4.1 <sup>2</sup>
<b>Foreign Trade<sup>3</sup></b>		
export to socialist countries	-19.1	4.7
export to nonsocialist countries	-16.9	0.6
import from socialist countries	5.8	4.8
import from nonsocialist countries	-17.1	1.9

1. Increases over expected 1984 results.

2. Increases over actual 1984 results.

3. Actual state plan results refer to planning process for 1985 (according to Government Decree No 308/84).

output included 796,000 tons of pig iron, 1,274,000 tons of crude steel, 857,000 tons of rolled stock, and 117,000 tons of steel pipe.

The entire increase in industrial gross output was ensured primarily by the rise of labor productivity. The number of workers increased by 0.7 percent over January of last year, and labor productivity rose by twice as much or 1.5 percent.

In the area of sales, the tasks planned for January were fulfilled in accordance with the fulfillment of the production plan. The plan of deliveries for the domestic market (at wholesale prices) was fulfilled 101.4 percent; the plan of deliveries for export to socialist countries (at wholesale prices), 97.1 percent; and the plan of deliveries for export to nonsocialist countries, 98.9 percent. In comparison with January of last year, deliveries for domestic trade increased by 3.1 percent; deliveries for export to socialist countries dropped 6.4 percent; and deliveries for export to nonsocialist countries remained approximately at the same level as last year.

Sales, too, developed in a differentiated manner in January. Of the enterprises that had these indicators in their plan, 35.7 percent fell short of the planned deliveries for domestic trade (at wholesale prices); 40 percent of the enterprises fell short of their planned deliveries for export to socialist countries (at wholesale prices); and 37.7 percent fell short of the planned deliveries for export to nonsocialist countries.

In construction, the construction enterprises performed 4.8 billion korunas' worth of construction work with their own personnel. In comparison with January of last year when weather conditions had been favorable, the volume of construction work that the construction enterprises performed with their own personnel was lower by more than 20 percent. (The annual state plan calls for an increase of 0.9 percent in the volume of construction work over 1984.)

The January output plan in construction was fulfilled 79.5 percent, and two-thirds of the enterprises fell short of their economic output plans. Labor productivity, too, was lower in construction by 20.3 percent than in January of last year; it was lower also in comparison with the economic plan for January. At the same time, employment developed roughly in accordance with the targets of the annual state plan.

Public transport hauled 42.4 million tons of freight, 16.5 percent less than in January of last year. The plan for public freight transport was fulfilled only 84.8 percent in January, including 84.5-percent fulfillment in rail transportation, and 86.3-percent fulfillment by the CSAD [Czechoslovak State Motor Transportation]. Bad weather affected primarily inland navigation: its plan was fulfilled only 27 percent.

Despite the bad weather, freight loading on the railroad included 6.4 million tons of solid fuel, 582,000 tons of ore, 2.2 million tons of metallurgical and engineering products, and 2.0 million tons of building materials. However, the railroad fell short of fulfilling its freight loading plan, overall and by commodities as well.

In terms of freight car units, the average daily loading of freight on the railroad was lower by 13.9 percent than in January of last year. The average turnaround time per freight car unit increased to 4.55 days or by 16.7 percent.

The targets for the procurement of basic livestock products in January were suitably ensured. The procurement schedule was exceeded for practically every type of basic livestock product, with the exception of milk. The most pronounced overfulfillment of the procurement schedule occurred in the case of slaughter hogs (by 5.7 percent), eggs (by 5.1 percent) and slaughter poultry (by 4.7 percent). In January, the procurement schedule for slaughter cattle was fulfilled 100.8 percent; and for milk, 99.0 percent. In comparison with January of last year, procurement was up by 2,200 tons or 1.5 percent for slaughter animals, including poultry; and by 17.5 million or 6.7 percent for eggs. But the procurement of milk was down by 7.4 million liters or 1.7 percent.

The retail turnover maintained its fairly rapid growth. Sales of merchandise at organizations of the main trade systems totaled 17 billion korunas, an increase of 4.8 percent over January of last year.

The retail turnover's high growth rate in January was achieved primarily at organizations of Food Trade (index 107.9) and Fruit and Vegetable Trade (120.7), in the sale of industrial goods and within Shoe Trade (116.7). Also at the Department Stores the retail turnover (106.3) was higher than the average for domestic trade as a whole. On the other hand, sales at the Textiles, Furniture, and Jewelry organizations were below the level for January of last year.

Fulfillment of the economic plans for retail turnover was 101.3 percent for the main trade systems jointly. Overfulfillment of the January plans for retail turnover was the most pronounced at the Coal Depots (by 24.8 percent), and within Fruit and Vegetable Trade (by 15.2 percent), Shoe Trade (by 4.6 percent) and Food Trade (by 4.3 percent).

In foreign trade (at current prices) the turnover with the socialist countries developed faster than with the nonsocialist countries. Total export was less than in January of last year. Total import increased by 2.5 percent.

The currency in circulation increased by 454 million korunas in January, reaching 52.5 billion korunas on 31 January 1985.

1014  
CSO: 2400/317

CZECHOSLOVAKIA

SET OF MEASURES EFFECT ON LABOR FORCE MANAGEMENT VIEWED

Prague HOSPODARSKE NOVINY in Slovak No 12, 1984 pp 68-76

[Article by Dr Eng Emilia Kovacova, CSc, Bratislava College of Economics: "The Influence of Economic Tools on Labor Force Management in Economic Units"]

[Text] "International comparisons with comparable industrialized countries indicate that the labor intensiveness of production in our country is high. Other industrially advanced countries have in recent years been increasing the production of their processing industries with declining numbers of workers, while in our country the number of workers in these industries has been increasing."<sup>1</sup>

Evaluation of the Effectiveness of Selected Economic Measures Contained in the "Set of Measures"

The growth of employment throughout our economy in the 1981-1983 period corresponded to the basic trends established in the Seventh 5-Year Plan. In terms of social product and national income, however, developments have been less satisfactory. Overall, there have been few reductions, either absolute or relative, in the work force, and in a number of enterprises work force utilization has even worsened since 1980.

This situation is influenced by a number of primarily physical factors in production and output, as well as by the techniques that are employed to manage the capital replacement process.

The economic pressure exerted by certain elements of the system of planned economic management, in their announced forms, is directed at improving the efficiency of the factors in production, including the labor force. The net result has been, however, that these measures have not effectively countered the interest of the khorraschot sphere in creating the greatest possible number of positions, without regard for their effective utilization.

This conclusion resulted from an evaluation of the labor management results at selected economic production units [VHJ] and enterprises and from professional studies of other selected enterprises.<sup>2,3</sup> It is further supported by findings concerning the impact of the basic accrued wages

component on adjusted value added [hereafter UVV], of the incentive component of accrued wages on return on production assets, of the elimination of the wage "cap" on the growth of average wages, of the reduction in binding limits on numbers of employees, and of other measures.

#### Tying Basic Component of Accrued Wages to Adjusted Value Added (UVV)

It is generally acknowledged that linking the basic component of accrued wages to UVV is a better way to assure the requisite proportions in the distribution of national income between retained earnings and the individual distribution fund than was the case when basic accrued wages were tied to total output, or gross production.

Under the new conditions economic units, on the basis of conversion factors, attempt to regulate the overfulfillment of planned UVV targets at a level that results in the growth of usable accrued wages, and at which existing wage regulations permit these usable accrued wages to be drawn upon. The shift from a situation where accrued wages were tied to gross production to one where accrued wages are tied to UVV has not, however, created an economic incentive to reduce the work force. It makes it more difficult, to be sure, for enterprises to increase their accrued wages without also increasing the value of output but, as results to date indicate (1981-1983), not even this new link is preventing enterprises from increasing usable accrued wages at the same time that the value of production is stagnating or even declining.

Available data indicate<sup>4</sup> that national income was flat from 1981-1982, while accrued wages paid out in the branches of the material sphere increased by more than 1.5 percent in comparison with 1980. This may be in part accounted for by the fact that the UVV indicator does not reflect only the magnitude of value added (in the sense of newly created value), but also capital asset depreciation and other cost items that offset the newly created value figure. In a number of economic units and sectors the impact of this annual capital asset growth is greater than the growth of the physical volume of production and overall output. Under such conditions, capital asset depreciation increases proportionally to capital asset growth, while adjusted value added figures increase more slowly. This means that depreciation increases as a proportion of UVV. At the same time accrued wages will also increase, but at a rate less than that of UVV, though greater than that of newly created value, e.g., net production. This means that it is possible that tying the basic component of accrued wages to UVV will prevent neither an increase in accrued wages as a percentage of newly created value nor a reduction in profits as a percentage of newly created value.

At the same time, in all instances where annual increases in capital assets are greater than increases in total output and UVV, there is a concurrent decrease in the return on production assets. For this reason economic entities, to the extent that they make their own decisions, give priority to increasing UVV even if this means reducing the return on production assets.

These findings point to a low degree of effectiveness for the Set of Measures in the following areas:

- in plan fulfillment, and especially in the overfulfillment of planned UVV and labor productivity measured with the assistance of UVV;
- in optimizing national income growth, in assuring the necessary growth of the capital stock, and of other inputs in the capital replacement process.

This situation could be improved by tying accrued wages to newly formed value. Tying the basic component of accrued wages to, for instance, net production or net sold production would better assure the desired growth rate and proportionality of distribution of newly formed value between wages and profits, in other words, between the fund for individual distribution and retained earnings, than does the current linkage.

This means that annual increases or decreases in basic accrued wages, assuming that other conditions remain constant, would be placed in a closer and economically more justifiable relationship to annual changes in net production. However, even this sort of relationship cannot, in and of itself, develop an economic incentive to reduce the work force. This depends on a number of other factors.

It appears to be desirable, therefore, when working to refine further the planned management system of the national economy for the period after 1990, to do the following:

- reevaluate the UVV indicator as applied during the Eighth 5-Year Plan;
- research and conduct experiments with the net production, or net sold production indicators, making use of experiences with normative net production from the USSR or from other socialist countries.

#### Findings From the Use of the Net Production Indicator

As is well known, the USSR has been using, on the basis of a CPSU Central Committee and USSR Council of Ministers resolution of July 1979, a normative net production indicator in addition to other indicators. Another important indicator is the "full actual labor intensiveness indicator." Similar experiments are under way in other socialist countries as well. In terms of the normative net production indicator,<sup>5</sup> the major advantages are that:

- it eliminates the influence of the value of materials both from calculations of production increases and from labor productivity calculations;
- it prevents the double counting of production growth rates and labor productivity;
- it improves the setting of standards for work;
- it increases the accountability of managerial employees for the quality of the standards for net production.

The problems and shortcomings of the use of this indicator are that:

-- incentives are removed for increasing the production of materials-intensive products, while opportunities are increased for the production of the most labor-intensive items,<sup>6</sup> which causes some deformations in the production mix;

-- the use of this indicator does not facilitate the socially desirable speeding up and increasing effectiveness of R&D;

-- this indicator is not very functional; for instance, profit information figures can be obtained no earlier than in the middle of the next month;

-- there is an incentive to produce those products with the highest margins (also a source of deformation in the product mix), which results in undesirable structural changes in the production mix, while also skewing the growth rate of labor productivity as calculated with the assistance of the net production indicator;

-- insufficient account is taken of changes in the quality of production; in normative net production there are few bonuses or penalties for increasing or decreasing the quality of output: there is a need therefore to refine these bonuses and penalties.

The most serious shortcoming of the net production indicator and the normative production indicator is that they do not assist in implementing the socially desirable objective of selling that which is produced. Their focus is only on production.

#### Tie Between Incentive Component of Accrued Wages and Return on Production Assets

The objective of tying the incentive component of accrued wages to return on production assets is primarily to strengthen the economic incentives to improve (increase the rate of utilization) the capital stock and inventories. In the case of tying the incentive component to return on production factors there is the additional objective of improving work force utilization.

Theoretically the evolution of return on investment (profit as a percentage of production costs) reflects not only the level of utilization of capital assets and depreciation, but also the level of utilization of inventories (including inventory financing charges) and other costs involved in warehousing, as well as the utilization of the work force, expressed as wage costs per unit of production. Studies have shown that economic units, when given the decisionmaking authority, give priority to increasing UVV rather than increasing return on production assets. At present it is more important for managerial entities to assure a certain increase in UVV even at the expense of a reduction in return on production assets and return on investment.

Despite the foregoing, we are of the opinion that it cannot be concluded that unfavorable results both in capital stock and labor force utilization have resulted exclusively from insufficient intensity of the economic incentives for effective work force management and capital asset utilization. The problems facing effective work force management are not related solely to shortcomings in economic incentives, but lie rather in the broader context of the management techniques related to the material preconditions of production unit operation at the center.

#### Tie Between So-Called "Wage Cap" on Growth of Average Wages and Work Force Management

The termination of the "wage cap" has eliminated one of the barriers to the better utilization of accrued wages, or to the implementation of the principle of merit (linking increased earnings to individual and collective output). Managerial entities have stopped being penalized for higher growth of average earnings, as provided for in objectives of wage-policy documents of the pertinent national economic sectors.

Developments to date have indicated that there has been no significant differentiation of average earnings either within VHJ's and plants or between them, even though larger differences have appeared in aggregate output between individual VHJ's and between employees of work collectives both at the production and managerial levels of VHJ's and plants. This confirms that the barriers to the improved utilization of given production factors, namely the capital stock, R&D findings, and the work force, lie not only in measures designed to increase wage differentiation based on output, but in other areas of management as well. The termination of the "wage cap" will result, in the final analysis, in incentives for managerial entities to fulfill planned UVV with fewer employees, even though there will continue to exist other obstacles working in the opposite direction.

#### Tie Between Normative Relationships of Accrued Wage Formation and Work Force Management

In general it may be stated that in terms of economic pressure on the utilization of hidden capacity in labor force management, the proper determination of the percentage of UVV to be formed by accrued wages, expressed as a standard (or some other indicator) for a given managerial entity, is very important. There is also general agreement that the impact of a properly established percentage of UVV for accrued wages would be increased given knowledge of this percentage a minimum of 5 years ahead of time, with the certainty that the percentage will not change. The record also shows, however, that relative and in some cases absolute work force reductions are achieved only insofar as a supervisory agency stipulates the percentage of UVV to be accounted for by the basic component of accrued wages, or by setting an absolute limit on accrued wages. Because of the differing levels of managerial sophistication that prevail in different enterprises along with differing degrees of economic efficiency, standards for accrued wages formation are being established on an enterprise by enterprise basis, even if the enterprises in question have identical fund structures. This situation does not always offer economic incentives for enterprises to bring the sophistication of their management in line with socially desirable costs. Only on rare occasions do enterprises take the initiative and make larger than planned cuts in their work force.

Moreover, achieved profitability levels do not adequately reflect actual differences in economic efficiency and quality (because of the existing price

structure). Nor are costs being properly invoiced to production or other areas of activity. Therefore, there does not exist an objective base for the differential establishment of standards. This is the area of the most serious shortcomings in the managerial activities of VHJ's and other economic units.

It has been generally assumed that the application of the principle of a long-term, standardized connection between wages and other chosen indicators would significantly increase the efficiency of the existing system of economic incentives. Surveys have indicated<sup>7,8</sup> that it is precisely this principle of the Set of Measures that has not been acted upon. Opinions have therefore been expressed that regulations for the distribution of revenues at the enterprise level (defined as the normative share of UVV represented by the basic component of accrued wages along with other standards) should be set for several years at a time, without regard for the status and evolution of the material conditions of the national economy. Others hold the view<sup>9</sup> that a long-range standardized relationship for accrued wages formation "demands the timely formation or assurance of all planning preconditions for a rigorously established increase in value added, i.e., measures which assure materials conservation, the proper valuation of energy, raw materials and materials, the improved utilization of the capital stock, new product innovations embodying more sophisticated technical parameters."

Therefore, in the future it would be desirable to establish a standardized, long-term relationship tying the amount of any increase in accrued wages to increases in value added, which would be consistent with experiments that have been conducted in the USSR.

While the importance of long-term standards should not be underestimated, it must also be stated that our findings have shown that, given current management techniques for economic activities, it is not possible to develop the kind of economic pressure on economic entities that would result in economic competition within the context of the kholzraschot undertakings of the economic sphere. Under the existing system of management, after all, the determining influence in labor force management comes from directives issued by the state economic center, with consideration only given afterwards to the economic incentives of economic units (i.e., voluntary efforts by enterprises supported by economic incentives).

#### Terminating the Binding Limit on Total Numbers of Employees

This measure has eliminated one of the serious barriers to efforts to manage the labor force and accrued wages in an efficient manner.

The designation of both the number of employees and of wages as a percentage of UVV amounted in practice to the designation by directive of average wages. The termination of the limit on total numbers of employees thus removed one of the important reasons for maintaining excessive labor force reserves as well as accrued wage reserves. Requests to increase accrued wages as a percentage of UVV were justified by a need for employees and the significant numbers of underemployed workers made it possible, even with great fluctuations

of production, to assure and even overfulfill, at the option of the enterprise, planned targets for production and overall output. Field data indicates, however, that in fact much has remained unchanged from this previous practice. "No significant progress has yet been achieved in planning for accrued wages. Ties within the plan continue to be made between the number of employees, average earnings, and total accrued wages... These facts result in a situation in which draft plans indicate a need for new employees and, therefore, for new accrued wages as well."<sup>10</sup>

Employees at economic units also point out that the function of their own plans and the establishment of limits on numbers of employees by the appropriate kraj national committees should be accompanied by measures directed at work force management for application at VHJ's and economic units. They recommend utilizing oblast resource balances and labor force allocation during the formation of long-range plans as one of the basic indicators of possible development, while limits for their own plans for the current period should represent guidelines only. Discrepancies in limits on employees frequently arise between the implementational economic plan and the oblast plan, resulting in a situation in which the kraj national committee penalizes the offending organization if limits have been exceeded. These organizations are then required to deduct the fine from their usable volume of accrued wages.

#### Main Cause of Improper Labor Force Management in VHJ's

The current situation in labor force management is not satisfactory, despite the fact that since 1981:

- certain economic measures have begun to be implemented which are intended to set up an economic incentive to reduce labor forces;
- certain administrative measures have been terminated which were retarding VHJ's from utilizing underutilized capacity in both labor and capital stock (these included the setting by directive of limits on numbers of employees, etc.)

The results from the functioning of individual measures (both economic and administrative) on labor force management have indicated that whenever there have been relative year to year reductions in the work force this has happened rather because of pressure from above, through limits set on accrued wages, and only in a small number of instances because of economic measures designed to provide an economic incentive to reduce the labor force.

Research at the VHJ level has also indicated that this situation arises because:

- of the concealment of otherwise obvious work force reserves which can be left idle and still fulfill targets, given specific material and technical conditions;
- of the slow growth in labor productivity and, recently, the significant decline in the overall effectiveness of labor.

Regarding the reasons for concealing obvious reserves, we have concluded that among other things there still exist barriers in the current wage system as well as in the "system for wage regulation." This means that given applicable principles and techniques for the management of the activities of VHJ's it should be possible through further improvements in the techniques and methods of economic incentives, in conjunction with the implementation of additional measures in the area of the expansion and refinement of economic incentives offered to VHJ's and individual work collectives, to achieve a reduction in work force requirements equivalent to the hidden reserves. With this in mind it would be desirable during work on further improvements on the planned national economic management system after 1990 to study once again whether it would be effective to:

- tie the formation of enterprise accrued wages not to adjusted value added, but to newly formed value (for instance, to net production, normative net production, sold net production, etc.);
- designate the standard accrued wages percentage uniformly for organizations with identical fund structures and for a longer period of time (at least 5 years), and to institute simultaneous measures to deal with negative and undesirable side effect on the development of average employee earnings;
- eliminate the conversion factors for critical indicators as well as the limit for the conversion of the basic component of accrued wages, along with the link to conditioning indicators;
- eliminate completely the system of supplementary and penalty amounts.

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A study of our findings has confirmed that the system of converting claims derived from a set percentage and the system of supplementary and penalty amounts hold back improvements in the discovery of hidden work force capacity, but do not offer sufficient guarantees against an undesirable, greater increase in the volume of accrued wages in comparison with increases in newly formed value.

A reevaluation of the justifiability of differentiating basic and incentive components of accrued wages merits special attention, as does a reevaluation of the existing system for forming and distributing the incentive component of accrued wages.

It appears that the following differentiation (distribution) of accrued wages would be economically more sensible:

- in connection with the output (quantitative and qualitative) of individuals and work groups;
- based on the economic performance of workshop (team) or other organizational units;
- tied to the economic performance of the plant, or of an entire VHJ.

It would also be desirable to implement and refine the principle that a stimulative function must be performed above all by the so-called basic component of accrued wages rather than solely by the incentive component, as is currently the case.

We should also evaluate the proposal for introducing a system for the formation of so-called wage reserves, i.e., within the framework of the system of financial reserves at the level of each VHJ, with the objective of utilizing these resources to compensate for earnings for nonperformed work (due to various types of down time, etc.).

The formation of these so-called wage reserves would in reality be a matter of dividing the volume of basic accrued wages into two groups, as follows:

- basic accrued wages paid for performed work;
- accrued wages paid for down time and similar presence at a work site that is not accompanied by work activity.

Under the currently valid system usable accrued wages are drawn upon even during down times as well as for other forms of unrealized output (for nonperformed work). Since accrued wages for these purposes are not specially formed or allocated it is impossible to define them absolutely or to guarantee (in terms of a piece wage for an employee) their differentiation in connection with individual output (merit). This situation results, among other things, in enterprises resisting the development of unambiguous, firm and binding regulations for the growth of earnings within VHJ's, and especially in their plants, guilds, operations, workshops, construction projects, etc.; they are not even capable in internal enterprise wage scales of establishing in a clear and binding fashion for wage employees an increase in earnings tied to increases in the individual output of this or that employee, or in connection with the achieved work performance of this or that employee.

The foregoing may be considered as one of the major reasons for the continuing existence of egalitarianism in compensation within certain classifications, and of the inadequate differentiation of earnings within certain wage classifications.

The implementation of this proposal requires further development and refinement of the system of planning and formation of both accrued wages groups and especially of the system for distributing accrued wage reserves.

Moreover, increased attention must be devoted to making wage classifications more flexible in terms of the hourly wage and wage systemization for technical-managerial employees. One possible avenue is for centrally approved wage rates to be considered as minimums. Under the current system it is possible to raise the hourly wage of employees (blue-collar workers) and the average earnings of technical-managerial employees only by increasing various ancillary mechanisms and payment forms, but not by changing the basic component of accrued wages. This makes it impossible flexibly to utilize just this component of wages as a tool to stimulate the quantitative and qualitative increase of individual and/or collective (group) output.

Studies<sup>12</sup> in VHJ's further show that many of them do not have the possibility, given the existing regulations, wage policy measures and wage forms, fully to

utilize formed accrued wages, even those that may accrue to them from work force reductions under the existing rules issued by the Federal Ministry of Labor and Social Affairs.

The efficiency of measures in labor force management can be achieved, however, only on the condition that in the other parts of the planned management system for the national economy the essential principles are adopted to fulfill the requirements of the shift of our economy to an intensive growth path and to increase the economic efficiency of overall work.

#### FOOTNOTES

1. From a speech by Lubomir Strougal at a nationwide conference regarding the improvement of the planned management system. PRAVDA, 17 March 1980.
2. Czechoslovak Research Institute of Labor and Social Affairs. Bratislava, 1982.
3. Research Institute of Social Development and Labor. Bratislava, 1984.
4. Federal Statistical Office. Statistical Yearbooks for 1981, 1982, 1983. Prague.
5. "Techniques for Determining and Experiences in the Application of the Net Production Indicator...1979-1980". Article by A. Bachurin, MOSKOVSYAKA PRAVDA, 16 July 1982. "...An overall evaluation of the utilization of normative standard production in the industry of the USSR in the initial years of the 11th 5-Year Plan appears to be positive. The most important economic measure of this 5-year plan is the shift of industry and construction to an evaluation of the work of enterprises and organizations according to net or conditional net (normative) production... It appears that we have found the proper path to an objectivization of the indicator 'growth of labor productivity for individual years of the 5-year plan...'"

For instance, under the conditions of the USSR, where the normative net production indicator has been used, the annual volume of production (1982/1981) increased by 4.9 percent and goods production by 2.9 percent. The production of high-quality, innovative products also increased.

6. Net production--represents new labor consumed during production; in contrast to wages it includes a contribution to social security and average sectoral profit. Its development is completely unaffected by the material intensity of production.
7. Czechoslovak Research Institute of Labor and Social Affairs. Bratislava, 1982.

8. Research Institute of Social Development and Work. Bratislava, 1984.
9. PLANOVANE HOSPODARSTVI, No 5/1984, in the article "The Plan in the Planned Management System," p 5.
10. PRAVDA, No 246, vol 65, 17 October 1984: "Is There a Lack of PS?"
11. See I. Bastyr, HOSPODARSKE NOVINY No 17/1984, supplement p 2.
12. This was confirmed by field studies undertaken by the Czechoslovak Research Institute of Labor and Social Affairs in Bratislava in 1982 and by the Research Institute on Social Development and Labor in Bratislava in 1984.

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CZECHOSLOVAKIA

#### ROLE OF PHYSICS IN INDUSTRY OBSERVED

Prague RUDE PRAVO in Czech 6 Mar 85 p 4

[Article by Docent Dr Vratislav Kapicka, CSc, acting dean, School of Natural Sciences, University of Jan Evangelista Purkyne, Brno: "Physics in Industry"]

[Text] Advantage should be offered by using some of the experiences and developmental trends in promoting production in the world's most industrialized countries in our country as well. One of these trends is the attainment of a certain share of natural scientists among college-educated personnel providing for industrial development and production.

An opinion was voiced at a conference conducted in Brno on the theme "Physics and Physicists in Industry" to the effect that in many sectors, e.g., electronics, while we did not lag for many years, by neglecting the conditions for application of scientific findings in general there was created a situation in which many of our products have often failed to measure up to top requirements. The same applies to their operational parameters. A similar situation is found in product innovation, e.g., in the machinery/metallurgical industry and other sectors. In promoting technical progress there was a failure to always put to use the latest findings of natural science, e.g., physics. This need is quite obviously reflected in the operation of many enterprises, not only ours, but foreign ones as well.

Since we do not want the production of complex systems and products to be based solely on empirical findings, there is a need for cooperation of all professions, particularly, however, between natural scientists and engineers, i.e., in this specific case between physicists and engineers.

New operational ventures in the national economy call for a new manner of assessing the technology and operational procedures being introduced. That is the case, e.g., in underground mining, where it appears necessary to assess many facts specifically from the physical aspect.

The conference also stated the urgent need for dealing with the problem of establishing joint work facilities of industrial enterprises and institutions of higher learning that would make it possible to attain a high technical level of products by utilization of the latest scientific findings. The application of existing experience from natural science disciplines, e.g., physics, provides a guarantee for developing top-level products (e.g., the electron lithograph) and achieving the commensurate economic results.

CZECHOSLOVAKIA

CHEMICAL INDUSTRY DEVELOPMENT SUMMARIZED

Bratislava PRAVDA in Slovak 4 Mar 85 p 3

[Article by Julius Krajci: "Forty Years of Chemical Industry Development"]

[Excerpts] Much personal experience has already taught us that we are not aware of the true value of things until we are deprived of them in some manner. It is not impossible to imagine what would happen if one day some of the chemical industry enterprises which have sprung up and developed in Slovakia since its liberation ceased to exist. Here are concentrated 100 percent of the Czechoslovak production of such significant products as rubber conveyor belts, polyamide (PAD) textile silk, PAD cord silk, polyester (PES) silk, polypropylene (POP) tow, POP staple, POP textile silk, rubber floorings, high-pressure polyethylene, viscous textile silk and some important chemicals. SSR chemical enterprises further produce approximately 45 percent of passenger car tires, a major part of urea, nitrogen fertilizers and multicomponent granulated fertilizers. Without these and other products of the chemical industry we could by now not imagine the development and functioning of many branches of the CSSR national economy, nor even the attained level of meeting of our social and personal needs.

The development of the chemical industry has enabled us, among other things, to master one of the foremost tasks in the building of a socialist society--to provide nourishment for increasing numbers of people even while the per capita agricultural acreage is decreasing. The CSSR currently holds one of the leading positions worldwide in the consumption of industrial fertilizer, even though with the use of phosphorus, nitrogen and other fertilizers per hectare of soil we do not attain either the European or the worldwide average. According to UN data for agriculture and food industry (FAO), the development of production and use of industrial fertilizers represents the most reliable factor of intensification of agricultural production all over the world.

From this viewpoint, the SSR chemical industry holds a truly distinguished position in the CSSR national economy. Thus, e.g., all nitrogen fertilizers in the CSSR are produced from ammonia, the biggest producer of which is Duslo in Sala. The center of attention of fertilizer producers in Slovakia is currently not only the production of fertilizers with regard to quantity, but improving their quality as well as the production of new types of fertilizers, including liquid fertilizers, enriched by trace elements and

growth stimulants. Hand in hand with all this also continues the development and production of new types of plant protection agents to reduce their detrimental effect on the environment.

The petrochemical industry has become the main base for wide development of the production of fibers.

The SSR is to produce in the current year almost 122,000 tons of chemical fibers, of which almost 54,000 tons are polyamide (PAD), over 16,000 tons polyester (PES) and almost 44,000 tons polypropylene (POP). Even though some of these fibers are exported, to enable us to import, among other things, other types of fibers not produced in our country, most of them are still processed in our textile plants throughout the CSSR. The latter will valorize them by turning out final products, some of which also go for exports. Thus, even in this manner, indirectly, products of the chemical industry are becoming in the products of other branches of the national economy articles for our exports.

Chemistry also has a significant share in meeting a third basic need of people, the need for a place to live. In this case it involves, e.g., the production of floorings, coating materials, additives to concrete and cements, propellants and tires for construction machinery and transportation means, etc. By production of conveyor belts for coal mining our chemical industry also contributes to providing heat and energy in general for our residences as well as for all branches of the national economy.

The share of the SSR chemical industry's production in the nationwide chemical industry's production currently ranges between 35 and 40 percent (the development of this branch continues in both national republics).

No less admiration and recognition is deserved by the growth of people, workers at all posts of usually complicated and demanding production, as chemical production generally tends to be. After liberation, experts with college education in the chemical industry in Slovakia could be counted, figuratively speaking, on the fingers of a few hands. Today, in 7 independent research institutes of the Slovchemia trust, which includes 17 large production enterprises, and in 18 R&D units in enterprises, there are more than 3,500 specialists at work. All management posts in the trust--in enterprises and in the general management--are occupied by people with the requisite, mainly college level, education. As can be seen from these facts, development of the chemical industry has contributed not only to meeting the material needs of our society, but also to improving its overall state of knowledge and cultural level.

Among some of the more significant results achieved by Slovchemia's R&D base over the past several years can be named, e.g., a new copolymer with excellent properties for the production of phonograph records, a strong polymer for production of extruded pipes; new rubber and plastic chemicals (antioxidants, flame retardant); new adhesives (glues, cements) and coating substances; several new agrochemicals--innovated multicomponent granulated fertilizers,

liquid single and multicomponent fertilizers, pesticides, new types of fibers (e.g., air-shaped Virelon POP tow, POP textile silk); industrial explosives with new properties (safety-oriented); PVAC dispersion for construction; new types of foils; new types of additives improving the properties of oils, lubricants and plastics.

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CZECHOSLOVAKIA

HIGHER GENERATIONS OF COMPUTERS, ROBOTS VIEWED

Prague RUDE PRAVO in Czech 27 Feb 85 p 4

[Article by Ivan Plander, corresponding member, Czechoslovak Academy of Sciences: "Higher Generations of Computers and Robots--One of the Goal-Oriented Projects of Basic Research," compiled from a contribution to the discussion at the 47th Plenum of Czechoslovak Academy of Sciences members]

[Text] New R&D findings accelerate the process of automation and place innovation of productive factors of the economy into a prominent position. Two key factors come into the foreground as the instrument of this process: electronization (primarily computer technology) and comprehensive automation, including robotization.

The CSAV [Czechoslovak Academy of Sciences] has incorporated into the state plan of basic research the goal-oriented project "Information and Control Systems for Robotics," to promote the comprehensive program of robotization in the Seventh 5-Year Plan. This goal-oriented project is dealt with in the Institute of Technical Cybernetics of the SAV [Slovak Academy of Sciences] and by concentration of capacities in 23 additional work centers of the CSAV, institutions of higher learning and research institutes throughout the CSSR. Basic research is herein closely cooperating with work centers of applied research and development.

Three implementational outputs have been assigned to this goal-oriented project in the Seventh 5-Year Plan:

The complex of an intelligent robot with visual and a mechanical power control subsystem which with the aid of a television camera, the requisite sensors and other technical means of computers will perform automated assembly on the basis of the findings of the theory of small intelligence. The implementer and user of this complex will be the enterprises and plants of the Heavy Engineering Plant VHJ [economic production unit] in Martin and other engineering plants. The basis for orientation of this complex is given by the fact that assembly operations in engineering represent some 40 percent of labor-intensive input and, after welding, are the most important operations that call for robotization. A robot connected with a visual system was successfully demonstrated at the international exposition Robot 84 in Brno.

Another output is an adaptive welding center with a robot, which will meet the needs of engineering in the area of full automation of welding. Part of the goal-oriented project deals with an information and control system for robots for finding the beginning and end of a weld seam, guiding the welding electrode along the weld seam with the required precision even under changed external conditions. Two positioning devices next to the robot control, with attached weldments, a total of nine degrees of freedom. In this manner the Czechoslovak national economy is acquiring a comprehensive welding center with a robot, which after installation can be immediately incorporated into the production process without supplementing by other systems. Its implementer and user will again be the enterprises and plants of the Heavy Engineering Plant VHJ in Martin and other engineering enterprises in the CSSR. It is envisioned to produce around 750 of these welding centers by 1990, and others are planned for export, particularly to the Soviet Union.

The third implementational output are specialized problem-oriented computers to provide computer technology for the area of artificial intelligence and robotics where the parameters of all-purpose computers do not meet the requirement of real time operation. They are formed by a complex of the SMED SM 5320 computers and the SM 5430 videographic computer for processing images with the requisite software. These implementational outputs are intended to meet the needs of integral control of a group of industrial robots at various levels and at the same time will create conditions conducive to the control of flexible production systems in general engineering, power engineering and transportation. It is anticipated that several hundred of these systems will be turned out in the course of the Seventh and Eighth 5-Year Plans. The implementor is to be the Computer Technology Plants concern enterprise in Banska Bystrica.

In the interest of shortening the science-research-production-utilization cycle, comprehensive R&D and design groups are formed to make implementational outputs directly available for the needs of production. An example of such a combination of R&D implementation of a functional prototype is the Oj 10 welding center, with a robot which was completed and tested, including technological welding operation, in the first half of 1983; the prototype was turned over for testing in late 1984.

The devised robotized welding center attains functional parameters comparable to the world's top products. Its implementation was participated in by two organizations of Heavy Engineering Plants--the Zvolen Research Institute and the Dubnica Electro-technical Institute, and in the area of basic research the SAV Institute of Technical Cybernetics. In view of the fact that the three mentioned organizations are professional centers in their respective areas, it became possible to devise the welding center in its mechanical and electronic parts in approximately a single year from the signing of the economic agreement contracting its development.

As part of the multilateral cooperation among the academies of sciences of socialist countries, preparations are under way in Czechoslovakia for coming up with a project for a new generation of computer technology and information science based on utilization of the principles of artificial intelligence

which will make it possible to devise systems with considerably higher qualitative and quantitative properties. A characteristic feature of the new generation of computers will be the use of natural language, natural speech, images and graphs for direct communication between man and computer.

The devising of the new generation of computer systems will progress in close international cooperation under the supervision of the Soviet Academy of Sciences. The function of base institute in Czechoslovakia was entrusted to the SAV Institute of Technical Cybernetics.

In keeping with the resolutions of the 8th and 10th Plenums of the CPCZ Central Committee, basic research conducted by CSAV and SAV in technical sciences is concentrating forces of the R&D base on key tasks of robotics and computer technology. The goal-oriented project of basic research deals with theoretical problems of automation of discontinuous production processes based on robots of higher generations seeing the results through all the way to implementation through production. Enterprises which utilize intelligent industrial robots will not only be more effective from the viewpoint of cost, but will also be more flexible, capable of fast transition from production of one product to another. In addition, they will be producing 24 hours a day and 365 days a year, which will provide returns on investments made into machinery and equipment in a much shorter time.

The program for devising a new generation of computer technology now in preparation, computer and information systems will provide for improved quality of production and management in all branches of the national economy. Here it should be emphasized that the acquisition of proficiency in processing, transmitting and storing information through a new generation of computer systems is of basic strategic importance, comparable only to mastering the sources of energy, raw materials and food.

8204  
CSO: 2400/305

CZECHOSLOVAKIA

JPRS-EEI-85-043  
23 April 1985

LACK OF DISCIPLINE IN ENERGY CONSUMPTION VIEWED

Prague RUDE PRAVO in Czech 13 Feb 85 p 3

[Article by Eng Ivan Krechnak, SSR State Energy Control Office, Bratislava:  
"A Matter of Conscience or of Penalties?--Consumption of Energy and Discipline"]

[Text] It is a matter of common knowledge that production in our republic is marked by its high demands on energy. We hold one of the foremost positions in the world in per capita energy consumption. However, those values are not commensurate to the generation of national income or to gross product per capita. Our indicators are worse by 20 to 30 percent than in other industrially advanced countries. If we are to reduce production's demands on energy in the near future, we must know the causes underlying the existing state. This is, first of all, the low quality of production process management; low energy efficiency of obsolete production assets; turning out of products demanding on energy; slow introduction of processes less demanding on energy in production, and low utilization of secondary energy sources.

Uncovering these shortcomings that are the cause of our high demand on energy is even now the task of control commissions of comprehensive socialist rationalization. The results of their efforts should become reflected in the operations of every enterprise.

The Federal Energy Control Office as a control organ performs specialized supervision specifically of efficient use of fuel and energy sources. The law emphasizes prevention, i.e., the educational method. In practice this means that our personnel point out in a special analysis of energy management any detected shortcomings and request that the operator adopt effective measures for their alleviation. However, repeated inspections show that the sense of responsibility in the responsible personnel is often low. Our personnel repeatedly detect the persistence of shortcomings and in following the provisions of the cited law must impose penalties. It can be said that it is not until penalties are applied that an effective tool has been found. Their contribution is of importance to society as a whole--they provide for redress, prevent waste.

There is frequent talk about objective and subjective causes of the increased energy consumption. Our findings show that many of the objective difficulties can be alleviated or totally overcome if the responsible personnel would

see to the maintenance of work and technological discipline. Thus, it is a matter of conscience for each citizen to meet his basic obligations toward society. Those who cannot comprehend this requirement must be taught discipline even by means of penalties. It was the same way last year in 570 controlled organizations in Slovakia, where in 70 cases an appeal to the conscience of primarily leading managerial personnel proved of no help, and redress was not achieved until fines were applied in a total value of almost Kcs 280,000.

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GERMAN DEMOCRATIC REPUBLIC

RAILWAY SYSTEM TRANSPORT GOALS FOR 1985 OUTLINED

East Berlin EISENBAHNPRAXIS in German Vol 29 No 1, Jan 85 pp 3-6

[Article by Heinz Krueger, engineer, Reichsbahn Main Director: "The Railway System Faced with Tasks of a New Magnitude; 1985, the Year of Preparation for the 11th SED Congress"]

[Text] After the end of the GDR's 35th year it is possible to estimate both for the development of the economy overall and for the socialist railway system that the highest performances today were achieved in passenger traffic and freight transport. This development of capacity and the fulfilling of all tasks, which was thus made possible, was achieved by the diverse initiatives, which were developed under the direction of the party of the working class, of our railroad collective's workers with comprehensive cooperation between all main branches of service. It was possible to record a special increase in productivity in fall traffic because of the initiatives of our railroad workers which were developed in the "freight car combat action."

How can the details of the development of productivity be evaluated?

In 1984 10 Million More Persons Were Carried

In comparison to 1983 10 million more passengers were carried in 1984 (+1.7 percent). The volume of passenger traffic increased by 2.3 percent in connection with about 0.5 km in distance of travel. Beyond these quantitative results the task also called for assuming additional transport tasks from the GDR travel agency in the context of a special program of short trips. By September 1984 600,000 people, 100,000 more than last year, were carried.

The higher transport volumes were realized because of a substantial increase in the number of seats available. The number of express trains was increased by size; in this connection two new intercity express trains on the Zwickau-Leipzig-Berlin route were put on at the same time in order to improve travel opportunities. In order to adapt seat availability more flexibly to concrete travel requirements on a short-term basis, extra trains were put on and operated in international and domestic travel in addition to increased numbers of scheduled fast trains. Thus, in 1984 the growing long-distance

commuter traffic and the greatly increasing tourist traffic were taken into account. It was possible to reduce the extremely high overloading and thus make travel more pleasant.

In addition to the increased tasks in scheduled traffic in 1984, extensive special service was organized and implemented with high quality. Once again the special focus was guaranteeing transport capability for summer vacation travel and the increased vacation exchange traffic between the GDR and Poland. In addition to the extremely far-reaching realization of these tasks in the regular railway system by means of special seat reservations and additional cars for the train, which was expressly done for that purpose, about 1,000 special and extra trains were put on.

In addition, the 20th workers festivals and others were turned into passenger traffic tasks for special major political events, like the National Youth Festival at Pentecost in the GDR capital city of Berlin, the torchlight procession of the FDJ on the occasion of the 35th anniversary of the GDR.

Overall, it can be estimated that the increased passenger traffic tasks in 1984 were realized with greatly improved quality. Yet we should not conceal the fact that to guarantee work in this area which at all times is of appropriate quality much still needs to be done by all sectors which are involved in passenger traffic, especially as far as reliability in keeping to the schedule and train formation is concerned, as well as in respect to cleanliness and maintenance.

#### Freight Car Combat Action Produced Record Achievements in the Fourth Quarter of 1984

In the area of goods transport in 1984 the principal task for the GDR consisted in guaranteeing on the transport side continuous economic growth based on the economic strategy for the 1980's.

In this regard the tasks which are to be solved by the railway system were determined by the changes in socialist production under the changing external and internal reproduction conditions. This development was dictated in particular by the following factors:

--In connection with the shifting of primary energy sources, which is to be continued by the increased use of domestic raw coal, transport requirements have exceeded the average by 7.6 percent in the case of coal, which in turn involved technological consequences related to the share of E [fast train]-cars.

--The traffic policy goal of shifting the transport of goods by road to carriers such as railway and inland shipping, which in terms of the energy economy are more favorable, had to be further implemented with the goal of creating to an increasingly greater degree a genuine alternative to transporting goods by road. This means that when the transport of bulk goods in long-distance traffic was completely transferred to the GDR railroad it was also a question to an increasingly greater degree of shifting typical long-distance trucked goods to the railway system. In 1984 it was possible to

further develop large container traffic as the most favorable alternative to road transport. In contrast to 1983 an above-average increase was achieved in 1984 which was considerably beyond the plan.

In connection with dealing with the tasks for 1985, special consideration is being given to additional steps to shift the task to that carrier which is the most energy-favorable under given conditions.

With an anticipated increase of over 4 percent in volume in shipping goods, in contrast to the results from 1983, an above-average increase in volume in the Schwerin GDR railroad directorate can be expected in connection with the increased exports and imports via the GDR's seaports. Above-average increases in volume were achieved in connection with the development of coal shipping in the Cottbus and Halle GDR railroad directorates.

Particularly in the fourth quarter of 1984, the GDR railroad had to cope with extremely high cargo capacity requirements. The results achieved were not always timely nor appropriate to the commodity, although in the most important areas such as freight car turn-around, shipping of goods, unloading, and so forth, record values were achieved especially in October.

The special mobilization of all railroad workers in the context of the "freight car combat action" and the diverse activities which were developed in this connection were decisive for the above-average increases in volume which were achieved beyond the absolute record results which were achieved.

The cargo space requirements of the fourth quarter in 1984 are the standard for transport activity in 1985, especially the initiatives and measures which were developed in order to guarantee in a comprehensive way work with freight cars which is in keeping with output and thus to create the prerequisites for continuous cargo space availability which is in line with demand.

#### Growing Demands in Passenger Traffic and Goods Transport

In 1985 additional requirements in passenger traffic and goods transport must be realized with higher quality and efficiency; in this connection the focus is on fulfilling the transport tasks in a way which meets demand in respect to quality and quantity. In the preparation, organization and implementation of the tasks, the point of departure is that a decisive contribution will thus be made to carrying out our party's economic policy, which is marked by the course of the main task in its unity of economic and social policies so that the primary path to solving the tasks is comprehensive intensification of all transport processes and, without deviating from fulfilling the tasks in a way that meets demands, in the process new reserves must be developed primarily by reducing transport costs.

#### Passenger Traffic

In passenger traffic it is a matter of guaranteeing reliable work that is, technologically appropriate (schedule and train formation), that meets demand, that is, in a timely way with sufficient seat availability, and that is of high level which relates to cleanliness and service and maintenance.

**What are the details of this?**

**1. Guaranteeing work that is reliable and technologically appropriate.**

This is a task which must be solved in comprehensive cooperation by all main service branches, in that in the long-term it must be established in advance, at least 12 months before the beginning of the schedule, what concept of speed the schedule must be based on and what limitations on capacity in respect to handling capacity through preventive care and maintenance work must be considered in the schedule. This work must be implemented in a comprehensive way that involves all sectors in order to minimize limitations on capacity because of shutdowns: at the same time, the construction opportunities which are afforded by the shutdowns must be fully and thoroughly utilized. A special issue here is coordinating all the work which must be done on the tracks, switches, signals, bridges and the contact line on a specific section of track. All work which has been known about for a long time must be taken into consideration in the standard schedule by providing so-called schedule windows. True to the principle of "travel and build" it is thus possible to determine in advance in a timely way the handling capacity of the route and to avoid intermediate operational closings of the tracks which are linked with changes in the schedule.

At the same time consistent implementation of plan-based repair and maintenance is the best guarantee for avoiding operational disruptions which in part result in extremely late train arrivals and thus increase transport costs and limit efficiency. By timely organization of the work, the establishment of alternative rail traffic and abandoning connections can be avoided.

This comprehensive approach to guaranteeing work that is technologically appropriate also includes qualified schedule development, providing the necessary travel time reserves and travel time add-ons and the implementation to the minute of technology by the train dispatcher and engineer. Reserves which are present in the schedule, which also include the technologically conditioned excesses in travel time and stops, must be fully utilized in the event of delay in order to be able once again to eliminate as quickly as possible delays which have developed. The train conductor and controls can make the greatest contribution to this.

Thus a decisive prerequisite for technologically appropriate work or reestablishing controlled technology is the acknowledged awareness of the technology and the reserves contained in it. The most energy-favorable operation is always that which uses controlled technology.

**2. Guaranteeing work that meets demand**

This must be taken care of by thorough analysis of passenger flows, by evaluating the reports of needs from local agencies, the GDR travel agency and other tourist organizations and institutions for shaping the standard schedule to meet demand. In line with this principle the 1985-1986 schedule for the year was developed. Among other things, there is provision for the operation of two new city express trains between Berlin and Dresden and Dresden and Berlin.

After an additional connection from Zwickau via Leipzig to Berlin was started last year, this is another step toward further expansion of the city express network, also as an attractive daily link between other bezirk cities in the GDR depending on progress in gradually electrifying the system by 1990. Additional new accomplishments are also planned to take care of additional requirements in some places on single days, among others from Stralsund to Berlin and from Halle to Berlin. In international tourist traffic, in close comradely cooperation with our socialist neighbors, the availability of trains was also expanded. For example, a year-round Berlin-Budapest connection called "Metropol" was created which makes possible a day's stopover in Berlin and Budapest, respectively.

In June and July, the major travel months, additional trains to Varna and Koshice were planned for special days. New pairs of trains operate between Berlin-Krakow and Berlin-Katowice. In addition to these trains, which will operate regularly starting with the 1985-1986 year's schedule to take care of known requirements, it is essential to observe very closely and analyze every day the volume of passengers on individual trains and to draw appropriate conclusions with respect to meeting needs by guaranteeing the necessary capacity via operational additions to the scheduled trains and via providing earlier and later trains if the volume justifies it. In no case may travelers be left behind or may unreasonable overbookings be permitted.

The seat reservation system is of special importance for timely accommodation of needs. It should not be viewed only as a method for making seats available or assigning them, but rather simultaneously it serves to establish requirements for individual trains on specific days by the fact that all cases in which seat assignment is no longer possible because of full booking are identified and utilized for adding more cars or extra trains, or from this the need for extra cars or putting on extra trains is derived. This produced good results last year. Thus, among other things, additional extra trains for vacation traffic and for traffic within the GDR were provided for and operated.

Overall, we are expecting an additional increase in the number of passengers to be carried. The organization of passenger traffic in the context of summer vacations and of the continually growing vacation exchange between the GDR and Poland will be especially important for the GDR's travel agency. All tasks must be fulfilled by observing the key issues mentioned at the beginning, and with far greater quality than last year.

#### Goods Transport

In goods transport the task consists in producing on a daily average in 1985 3.5 percent higher volume in shipping goods than in 1984. At the outset, the most important issues in implementing the guiding decisions by party and government were mentioned with respect to creating the prerequisites for solving these demanding transport tasks. They are the guideline for our activity, in connection with which the evaluation by the Ninth Central Committee meeting points the way for preparing for the 1986 11 SED Congress.

For the GDR railroad, in particular, following tasks exist, in keeping with the consistent continued application of the economic strategy:

- Guaranteeing a substantial increase in volume of coal shipments in keeping with increased utilization of domestic fuels.
- Transport-related guaranteeing of foreign trade relations, which are expanding with the growing export strength of our economy, especially via our seaports and in traffic with the USSR using routes through Poland, as well as the accelerated development of transit freight traffic as a decisive contribution to developing our economy's foreign currency balance.
- Guaranteeing transport of construction materials to continue the housing construction program, the further development of the material-technical basis of the economy and for accelerated development of Berlin, the capital of the GDR.
- Shifting additional transports from road to railway, which will result primarily in at least a 10-percent increase in container and general cargo transport and will require new transport technologies which represent a genuine alternative to truck transport.

In connection with an above-average increase in shipping distance we must expect an increase of at least 5.0 percent in freight traffic volume.

These high transport requirements of the economy, which must be anticipated, require a decisive increase in the efficiency of the GDR railroad and thus creation of the prerequisites for being able to make the cargo capacity requirements available in a timely way and being able to implement the transport itself in a manner that is in keeping with time and quality. The most important task consists in far better utilization of the fleet of freight cars and through increasing the time-based utilization and accelerated turn-around by at least 1.9 hours/turn-around and static utilization (t/DA) by 0.6 percent with the goal of increasing the amount of goods which are to be transported in any year with a freight car by at least 3.6 percent to 1,450 t/DA.

What will it take to do that?

1. Guaranteeing continuous utilization of the car fleet by increasing nighttime loading and unloading and transport work on weekends and holidays.

The appropriate personnel, technical and technological prerequisites must be created especially for night work in loading and unloading which requires primarily that station operating and destination technologies be compressed in delivery and pickup. Care must be taken that no extra equipment relating to availability and destination with an idle time of more than 5 hours be permitted.

Only in this way can turn-around of at least 800 cars daily be speeded up by several hours. How important increasing continuity is for developing additional cargo capacity reserves is also evident from the fact that increasing the use of cargo capacity on weekends by one percent results in additional loading capacity of 11 kt. Current loading on weekends is 6 percent lower than workday capacities.

2. Increasing average utilization of freight cars by at least 0.6 percent to 20.25 t/DA.

This objective can be achieved by consistent application of specific optimum values, which are related to type and class of goods. In this connection to the extent possible providing necessary replacements must also be involved, for example, if flatcars for construction materials are made available as a replacement for E-cars. The use of optimum values must take place in the transport planning phase and have an important place in all work relating to car service in connection with use and availability of the cargo capacity. The principle is that the empty car which guarantees highest utilization in terms of space and weight must be made available.

In container traffic as a matter of principle spaces must be fully utilized. In traffic between container transshipping points only fully loaded container cars may be put into operation. If the load is too small the appropriate replacement must be provided. By increasing utilization of every DA by only 0.01 t (10 kg) 1,500 t more can be dispatched every day with the same cargo capacity.

3. Speeding up freight car turn-around by 1 percent = 1.9 h

Speeding up freight car turn-around by this degree takes on special importance because shortening turn-around by 1 hour is the same thing as increasing cargo capacity by at least 6,700 t/d. This means that in addition to comprehensive guaranteeing of safety, speeding up turn-around is the most important factor in intensification.

What are the key points in fulfilling this task?

--First of all, in guaranteeing high quality of work with freight cars which, in addition to absolute guaranteeing of operational safety, includes avoidance of cargo and car damage and of non-conforming cars. This definitely includes comprehensive implementation of the Saalfeld quality control system, that is, mainly disciplined implementation of freight train formation regulations in order to avoid unnecessary transport costs and not to delay freight en route and thus to eliminate economic losses.

This comprehensive approach to extensive increasing of the quality of work with freight cars also includes guaranteeing qualified car-service work, in respect to work with subclass signs, observing condition in terms of car technology and with respect to cleanliness, avoiding deadheading, observing centrally provided economic rankings and orderings in making empty cargo capacity available if overall there are inadequate cargo capacities, implementing the principles of controlled loading, guaranteeing the possibility of optimum values in utilization by making available the most favorable transport containers in any given instance by taking into consideration the specifics of the commodity.

--Secondly, in implementing technological measures to reduce idle times of freight cars in and outside auxiliary units. The point of departure for this

must be implementation of a well-researched analysis of the condition at the time with the goal of achieving the optimum during stops by changing the technologies of switching, availability, pickup, train formation, dispatching and other subtechnologies. If the change still does not result in achieving the objectives, then with an appropriate number of cars must be added to intensity there technologies in the local sector. As a matter of principle the idle times for a freight car, except for immediate loading and unloading, should not exceed in this sector 5 hours in individual cases. In the case of freight cars with gravity unloading or in the case of modern technologies in loading and unloading, the predetermined times (loading times) must be adapted to the situation in a manner that is effective with regard to turn-around. When there are entire trains it is necessary to proceed in such a way that unloading can be started immediately upon availability and can be finished in the shortest possible time. The empty train must depart without delay.

In every phase, as a matter of principle, the respective volume must be the basis, that is, work which is appropriate to the volume must be implemented.

--In the third place, in implementing measures for broad application of the principles of controlled loading.

This proven measure for intensifying transport work should be implemented more widely and with even higher quality. Loading must be "controlled," that is, with appropriate volume the loading time must be selected in such a way that loading is done in as short a time as possible. Operation of entire trains with the greatest possible load must be prepared and organized in the phase of longer and short-term planning.

In this process, when organizing, the receiver's possibilities must also be part of the basis in order to avoid getting extensively involved in extended holdover times. This means that the effect of speeding up, which is achieved by saving on rearrangements, should not once again be undone by extended unloading times. In respect to organizing entire trains discussions relating to dispatch, which are carried out with the shippers, also often involving the receiver, especially in the case of bulk goods, have proven worthwhile.

Classical whole-train formation with a positive car turn-around effect, of course, does not include gathering cargos with the shipper, often over a period of several days until there is a complete train.

This method of forming entire trains does not result in shortening car turn-around, rather, primarily in international freight traffic, it results in exceeding delivery times and thus in financial losses. Thus, the last-mentioned form of an operational relief measure must be utilized for the event that a switchyard must absolutely be relieved of rearranging tasks.

In every case controlled loading has as its goal speeding up car turn-around as a decisive factor in increasing efficiency, both in respect to what concerns the formation of entire trains in the familiar technological form of entire shippers' trains and technological entire trains as well as saving unloaded movement. Controlling loading to save unloaded movement has, as a

method of qualified car-service work, the goal of undertaking empty car replacement for loading to the extent possible taking into consideration car requirements and also loading in the appropriate car category, even as a replacement, if it can be justified.

One form of controlled loading, for example, is absolutely making available for loading the car group which is not available in adequate numbers at the delivery end and thus must be brought empty. By the same token, supplying loaded cars, which at the receiving end are not necessary for reloading and thus must again be dispatched empty in the context of balancing empty cars, must be avoided. The goal of avoiding freight car deadheading in the context of controlled loading consists in reducing the scheduled empty car balancing. This method is often confused with so-called "loaded empty car balancing." That is a practice which in every instance results in reducing the loadable goods in bezirks receiving empty cars and thus never results in saving unloaded movement.

In 1983 a 55.4 percent share of complete trains was achieved. In 1984 we are expecting 56 percent. From the vantage point of today to increase the efficiency of our railroad by means of additional speed-up of turn-around (for every car in the whole train when operating loaded at least 2 rearrangements with a change-over time per change of 8 hours are saved) this result is still not adequate. Reaching at least 60 percent has been set as a target for 1985. Moreover, when forming whole trains, change-over capacities are freed up and there are substantial transport cost savings, primarily energy.

#### Shape Railroad Capabilities More Attractively

This is only a selection from a large number of tasks which have primarily a quantitative character and as intensification measures lead to increased efficiency. In the wake of economic realization of tasks to reduce transport costs, in addition to optimizing transport and delivery conditions, also through shifting the economically required transport tasks to the most favorable carrier as appropriate, the point is in respect to the railroad to have not only a quantitative approach, but also to create on a priority basis an alternative to road transport through qualitative measures. This means creating for the railroad conditions equivalent to those for road transport.

#### What kinds of transport in particular are involved?

- Container and general cargo transport which in 1985, too, is to show an above-average increase of at least 10 percent.
- Further development of transport of consolidated shipments in the context of domestic shipping. In the first half of 1984, 40,500 tons were dispatched on 146 routes. Conditions for further expansion to speed up transports and for increasing realizability must be created in cooperation with the local trucking enterprises.
- Introduction of a small goods express service beginning in 1985, especially as an alternative to trucking, for goods which cannot be transported as express cargo, general cargo or consolidated cargo.

--Gradual introduction of a DGS system, that is, establishing transit freight trains for shipments which must be transported quickly and which are picked up from 1:00 pm on at the sending station and which must be available for unloading by 12:00 noon the next day.

This means that in 1985 increasing the efficiency of the railroad as a prerequisite for timely and qualitatively-correct realization of all pending cargo requirements in large measure depends on the implementation of qualitative factors which serve to increase speed and also reliability in domestic, export, import and transit goods transport. In all instances it is a question of also shaping the capabilities more attractively, on the one hand to create the alternative to road transport and on the other in order to remain competitive in international goods transport and thus create the prerequisites for fulfilling the tasks in exporting services.

The above remarks are intended to deal only with the dominant key issues for 1985 in transporting goods and passengers. They make no claim to completeness. Such key issues as guaranteeing efficient use of power units, implementation and observance of the "travel and build" principle, especially to guarantee extensive tasks in electrification plus others are to be left for later articles.

The decisions of the SED's Central Committee's Ninth Plenum, especially for active, purposeful preparation for the 11th SED Congress through reliable and efficient fulfilling of kinds of transport requirements, are a guideline for our activity and at the same time help and support in solving the tasks.

12124  
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GERMAN DEMOCRATIC REPUBLIC

NEW TYPE OF FISHING TRAWLER DESCRIBED

East Berlin SEEWIRTSCHAFT in German Vol 16 No 10, Oct 84 pp 503-505

[Article by Dietmar Simon, engineer, and Dr Wolfgang Sonntag, engineer, Stralsund People's Shipyard VEB: "Stralsund" Type Fishing Trawler Atlantic 488"]

[Text] Just as the "Atlantic 333"<sup>1</sup> type frozen cargo trawler-seiner, which at present is being manufactured in series at the People's Shipyard, in its development takes into consideration the altered situation in the international fishing policy sector and is intended primarily for fishing in continental shelf areas, the substantially larger newly developed "Atlantic 488" type factory trawler "Stralsund" was also designed because of this fundamental situation for use in the open sea. At the People's shipyard with the "Atlantic 488" (construction began on 29 February 1984) the seventh generation of trapping fishing vessels is coming into being which are destined on a priority basis for the needs of Soviet ocean fishing and are being developed and built in close cooperation between buyer and shipyard. The steel hull for the pre-production ship of the new factory trawler series was built along with the series manufacture of the frozen cargo trawler-seiner series in the yard's shipbuilding plant.

The "Stralsund" type factory trawler is intended for fishing and processing its own catch. The ship has two continuous decks, a long superstructure and a four-story deckhouse and is designed for the transverse framing construction method (Figure 6). The trawler can be used both alone and as part of a fleet. There are appropriate facilities for transferring cargo or receiving supplies and equipment at sea. The cruising range is unlimited. The ship's systems and facilities ensure operation in temperate and tropical areas. Trips in ice-filled waters are possible depending on the kind of ice. The ship's stability in all instances when operating loaded meets the required norms for unlimited travel as a one-compartment ship.

The fishing equipment is intended for bottom trawling up to a depth of 2,000 m and for pelagic trawling to a depth of 1,500 m. The fishing equipment and the roughly 55-m long catch deck make it possible to work using the changeable net method. The raw fish is put into four precooling bunkers with an overall capacity of 50 m<sup>3</sup> of fish and 79 m<sup>3</sup> of water. Each 100 tons of fish can be cooled from +28° C to +1° C and 160 t of seawater from +28° C to 0° C.

The factory trawler has fish preparation and processing equipment to produce eviscerated fish with the heads removed, filets, canned fish, fish meal, fish oil from fish liver and fish oil for technical purposes.

The prepared fish or the whole fish is quick frozen and stored in two refrigerated cargo holds at -28° C. One of these cargo holds is a multi-purpose hold, that is, frozen fish or canned fish cargo can be carried there. A special hold is provided for both cans and fish meal.

Modern living, social, service and medical rooms are present to house the crew and provide their social care. In order to keep the noise level low in these rooms there is strict separation from the chief noise producers. The engine room and fish preparation and processing systems are located aft, living and recreation quarters forward.

The high level of automation of the systems guarantees 16-hours of engine operation without maintenance and service. The following systems in particular have been automated:

- remote operation of main engines, coupling and variable pitch propeller unit (AFA);
- remote operation of the shipboard power units (AFB) and control assembly for the power generating system (ASA);
- engine monitoring unit with the "Ursaldat" system.

Microcomputer systems, microprocessors, integrated circuits and relay equipment and the "Ursadat," "Ursalog" and "Translog" systems are used as the components. All switching, control and monitoring operations for generating power, distributing power, main drive system and the automated engine units are taken care of from a central control room in the engine area.

The factory trawler's radio and navigation systems meet the high requirements for fishing. The following systems are provided as a fish-locating system:

- horizontal and vertical sounder,
- vertical sounder,
- vertical sounder for fishing navigation,
- wired net sounder with a cable winch,
- wireless net sounder with net shooting equipment and winch for the floats.

The "Atlantic 488" type factory trawler "Stralsund'" meets the requirements for environmental protection with its bilge water oil removal system, a ship's waste water treating system and a ship's waste incinerator.

The ship is being built according to the regulations of the USSR's register. Furthermore, consideration was also given to the regulations of the International Convention for Preventing Ocean Pollution by Ships (MARPOL), the International Convention for the Safety of Fishing Vessels (Torremolinos), the International Accord for Ship Measuring, the regulations for Panama Canal passage, the navigation rules of the Suez Canal Authority and the USSR's national regulations.

### Main Dimensions

Total length	about 120.70 m
Length between perpendiculars	107.00 m
Molded beam	19.00 m
Molded depth to 1st deck (main deck)	12.22 m
Molded depth to 2nd deck (bulkhead deck)	9.27 m
Designed draft	6.40 m
Crew	115 persons
Equipment life	96 days
Class: KM [star] L 1 1/ A2 (catcher ship)	
Class of the production refrigerating plant: X [star] P	

### Cargo holds (net hold volume)

Multipurpose hold	
--Frozen fish	1,045 m <sup>3</sup>
--Cans	940 m <sup>3</sup>
Can cargo hold	755 m <sup>3</sup>
Frozen fish cargo hold	1,585 m <sup>3</sup>
Fish meal cargo hold	495 m <sup>3</sup>
Fish oil for technical purposes	52 m <sup>3</sup>
Fish oil from fish liver	13 m <sup>3</sup>

### Speed and line pull

Open-water speed	15 km
Line pull at 6 kn	343 kN

### Main drive

Twin engine unit with reduction gear, clutch couplings and two main engine driven generators, variable pitch propeller in a shroud

### Main engines

Two 6-cylinder 4-stroke diesel engines, type 6 VDS 48/42 AL-2;  
Rated output with n = 500 rpm                                    2 x 2,650 kW

### Main engine driven generators

Two three-phase main engine driven generators, type DGFSO 1421-6, 390 V three-phase current, 50 herz, generator output with n = 1,000 rpm    2 x 1,847 kVA

### Shipboard power units

Two 8-cylinder 4-cycle diesel engines, type 8 VDS 26/20 AL-2/S 450 L6;  
Generator output with n = 1,000 rpm                                    2 x 950 kVA

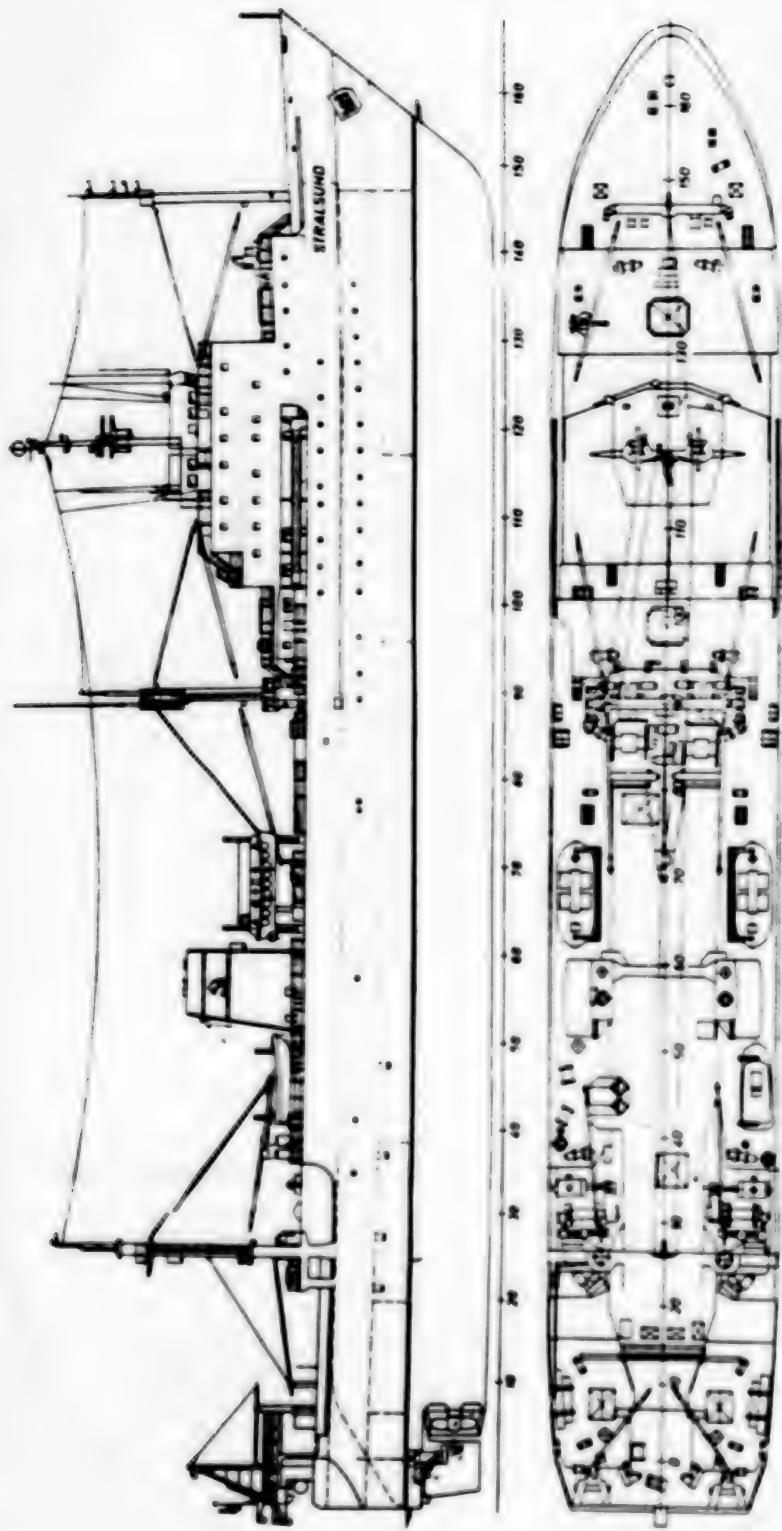


FIGURE 6: General Plan

**Ship's auxiliary boiler**  
1 ship's auxiliary boiler,  
type ESH 6.3:6.3 t/h  
1 exhaust gas boiler,  
type AKSR 1.4/6/16 +  
16: 1.4 t/h

**Shipboard power supply**  
380 volts three-phase  
current 50 hertz

**Fish preparation and processing systems:**  
1 universal butchering line  
1 butchering and filleting line  
1 nobby line  
1 line for unprepared small fish  
1 fish meal unit  
50...60 tons raw fish/24 h  
Liver oil system  
Canning system: 26,000 cans  
(no 6)/20 h

**Refrigerating plants**  
1 combined freezing and  
cargo hold refrigerating  
unit with:  
--2 conveyor freezers LBH  
31.5: 60 t/23 h  
--2 cargo hold air coolers  
--1 glazing unit and addi-  
tional refrigerating units  
and air conditioners

FOOTNOTES

1. Authors collective "Atlantic 333' Type Frozen Cargo Trawler-Seiner," SEEWIRTSCHAFT Vol 14, No 3, 1982, pp 120-147.
2. H. Mohnke and others. "Experiences in Designing a Large-tonnage Factory Trawler," Lecture I-4 at the VIth Fishing Conference, 1984, Leningrad.

12124  
CSO: 2300/298

HUNGARY

PULAI SEES MIXED RESULTS IN REFORM IMPLEMENTATION

Budapest FIGYEL0 in Hungarian 28 Feb 85 pp 1, 3

[Interview with Miklos Pulai, deputy chairman of the National Planning Office, by Dr Gyorgy Varga: "The Start and the Program"]

[Text] Pursuant to the 17 April 1984 standpoint of the MSZMP Central Committee and the subsequent resolution of the Council of Ministers, comprehensive modernization of the system of economic management has begun in 1985. On the initial results of this modernization, we are publishing the following interview with Miklos Pulai, the deputy chairman of the National Planning Office, by Dr Gyorgy Varga.

[Question] The readers of FIGYEL0 are familiar with the details realized so far under the comprehensive, multiyear program to modernize the system of economic management. Among them, what do you regard as the most significant and most profound change?

[Answer] The changeover to the new forms of enterprise management. Already 80 to 90 percent of the enterprises will be operating next year on the principle of self-management. This may produce far-reaching changes in the operation of the enterprises and their sociological conditions. It may modify the hierarchy that has evolved over decades. And it will definitely rearrange the interest relations that existed up to now.

[Question] What obstacles have you encountered in modernizing the system of management; in conjunction with which elements of economic management has it been necessary to retreat from the solutions planned originally; respectively, which are the areas where we have to proceed more slowly than had been planned?

[Answer] We recognized the limits and constraints of the pertinent measures, or at least of most of these measures, already in 1984, in the phase of preparations. For objective reasons, progress is indeed slower in some areas than what we would have liked. We should add, however, that certain circumstances are demanding the exact opposite, an acceleration of the process of renewal.

With some simplification we may say that we need first of all more favorable conditions for income generation to achieve faster economic growth in the second half of this decade than in the early 1980's. And such conditions presuppose the unfolding of the reform process.

So far as the limiting factors are concerned, I might mention that within the foreseeable future we will have to maintain the relatively large surplus of our trade denominated in convertible currency; and in ruble-denominated trade at current prices, we will have to achieve equilibrium, even if the terms of trade worsen. Which means that in the coming years the growth rate of national income will have to be higher than the rate of its domestic expenditure. If national income grows at the planned rate this year, domestic expenditure will not have to decline further and may even increase slightly. This is a rigid barrier, or scope for movement, that we must take into consideration when changing the system of economic management, particularly the system of economic regulation, and setting the yardsticks.

The additional income that can be spent at home will be used to stop the further decline of real wages, which have been sliding for years. We are not yet able to increase our investment. If we add that also our import will increase only slightly, then in its simplified form the system of interrelations is obvious that circumscribes our feasible scope of action in modernizing economic management, and in centralizing or decentralizing enterprise incomes.

But I do not want to cite only objective reasons regarding the limits of our progress. There have been, and still are, debates over the interpretation of certain provisions in the Guidelines. Some people are reluctant to employ the new solutions, are measuring the old ratios and adhering to them.

[Question] The regulation of enterprise income was based on the principle that a wider turnover-tax bracket, and lower direct taxes on enterprise income, would leave substantially more net income than at present for final demand. But the tax system's modification is not in accord with this principle. What is the explanation of this?

[Answer] It is true that, in comparison with the previous situation, there is no radical change in the subconcept of taxation. But we did not expect any such change as of 1 January 1985, because a complete restructuring of the tax system presupposes the solution of complicated tasks. Among other things, for example, we have to decide how to accomplish this restructuring: whether to introduce a value-added tax and a system of progressive personal income tax, or which variant of these taxes. We are now examining the proposals in terms of how expedient they are and how realistic are the prospects of their realization. A decision can be expected foreseeably this year on how the tax system is to be restructured.

[Question] I understand the difficulties that this task involves, but perhaps we could have applied more consistently already this year the adopted basic principles on taxation.

[Answer] You are right, but the changes are by no means insignificant. We have tied most of the taxes to the factors of production (to manpower and capital), and a smaller part of the taxes are proportional to profit. And we abolished the centralization of depreciation.

The shifting of taxation to the phase of final demand is being delayed, over and above the already mentioned difficulties, also by the fact that we must

give priority to slowing down the rise of consumer prices. Therefore we are able to proceed only gradually in unifying the turnover-tax rates. We have strived to avoid a rise in the consumer price level as a result of combining the turnover-tax rates. Thus the turnover tax has been unable to assume a greater role within the tax system. But this does not alter the fact that the tax system will have to be changed in accordance with the basic principles that, as you have mentioned, are formulated in the original concept.

[Question] Taking the limiting factors into consideration, do you see any possibility for employing monetary methods that are substantially more flexible than the fiscal ones, restrict the enterprises' decisions and options to a lesser extent while setting strict limits, but at the same time provide opportunity for the enterprises' more flexible operation?

[Answer] The application of monetary instruments and methods can be broadened only to the extent, and at the rate, that the enterprises' cost- and profit-sensitivity increase. For example, the bank now pays the enterprises 11 percent interest a year on their two-year time deposits. If we consider what is Hungary's present volume of investment opportunities that offer a higher return than this, I think we would expect the enterprises to choose the risk-free time deposits. Regrettably, that is not the situation. The net balance of such deposits is around 200 million forints. The enterprises prefer to spend their money, often for purposes whose yield is less than 11 percent a year. This is an indication that the monetary instruments' effect is still very weak. Therefore no one has dared, for example, to entrust to the enterprises' propensity to save the fate of the 14 billion forints of revenue that the accumulation tax now generates. Monetary instruments can be employed only when the enterprises' response to them becomes truly sensitive. Until then, in the interest of maintaining economic equilibrium, we must play safe and use fiscal methods.

[Question] But an overabundance of fiscal methods narrows selection and makes differentiation of the enterprises more difficult.

[Answer] That is true. Every method has some harmful side effect. This is why we will not abandon a gradual reduction of the fiscal methods' role in economic management. But I wish to call to your attention the data published in the 19-20 January 1985 issue of THE INTERNATIONAL HERALD TRIBUNE: as a proportion of GNP (which essentially is the same as GDP), taxes and social-security contributions amount to 35 percent in Japan, 57.7 percent in the Federal Republic of Germany, 59.5 percent in France, and 67.8 percent in Sweden. In Hungary this proportion is now around 58 percent, if we include the taxes paid by the population as well. (See our article "Tax Rate and Growth" on page 9 of this issue. The editors.) But in the above countries, unlike in Hungary, the bulk of tax revenue is collected indirectly, in the sphere of circulation and from personal incomes.

[Question] Enterprise experts are dissatisfied with the regulations providing incentives for ruble-denominated export. What is your opinion on this question?

[Answer] Since experience is still lacking, I can refer only to these views. I share the opinion that in this area we are unable to find a successful and effective solution. This was evident already in the phase of preparations. The difficulty stems from the need to develop a system that will guarantee the export of not only the highly profitable products, but also of the less profitable ones included in the international agreements. We must reckon with the fact that our partners want not only products whose profitability is favorable from our point of view. This is where the difficulty lies, and this is the source of the enterprises' criticism.

[Question] If I remember correctly, in debate on the system of economic management there was a proposal to consider, in the interest of fulfilling the pledged deliveries to other CEMA countries, the establishment of organizations that could bridge the contradictions arising in the enterprises' economic self-interest. What is your opinion of this possibility?

[Answer] We have not abandoned this possibility, although I would not approve of a rigid and also institutionalized separation of the two principal markets. I could imagine the solution outlined in the debates primarily in letting the enterprise compete in filling out the quotas set in value terms. The establishment also could be expedient of an account that operates flexibly as an equalization fund in trade with socialist countries. We will examine these proposals this year, and hopefully we will work out a solution that will be more effective and more reasonable than the present one.

[Question] I am again conveying the views of enterprise experts. In their opinion, the tax on capital is in conflict with the capital incentive. Assets are now treated as an accounting category. Should incentives be linked mainly to assets, to increasing the rate of return on assets, or perhaps to increasing the capital stock? The answers to these questions are important for the enterprises and the national economy as well, because they basically influence the enterprises' strategy and behavior.

[Answer] This is an important part of the further work on modernizing the system of economic management. According to our program, by the end of this year we will have clarified the theoretical principles of the capital incentive, and will have elaborated a practical system for it.

Incentives will continue to be linked mainly to profit also in the future. The subject of criticisms is rather the fact that profit provides mostly short-term incentives. The purpose of developing the capital incentive is to make the enterprise interested in permanently increasing its profit, by utilizing the accumulated incomes either at the enterprise or outside it, taking into consideration primarily the future development of the enterprise's profit and its market position. The important thing is that there develop a mechanism for the real valuation of enterprise assets. The capital incentive implies also the possibility that the collective may contribute from its own income toward increasing the enterprise's capital stock.

In response to the now fashionable contradiction between the capital incentive and the tax on capital, allow me to venture the opinion that the tax to be

levied on a weekend cottage deters few people from building one. I would sooner dispute the accumulation tax and regard its rate excessive, because it increases the cost of investments. If it were up to me, I would drastically reduce the accumulation tax and increase the tax on capital. But this would require the support of the trade unions and cooperative federations as well.

[Question] The measures introduced recently indicate that the price-curbing effect of the market forces is being replaced or reinforced on a wide scale by administrative measures, due in no small part to public sensitivity regarding the development of consumer prices. Do you think that the competitive price system will be able to unfold under these conditions? In other words, will it be possible for an actually functioning market to develop?

[Answer] This is now a sensitive question of economic policy and social policy. In this case the problem stems from process control, rather than from unclarified principles. In my opinion, the consumer prices' rate of rise can be slowed down under the next five-year plan. Since consumer prices reflect the producer price trends, the question is how to slow down the rise of producer prices. Primarily, I believe, by recognizing in them only the warranted costs that are consistent with prudent management. We have to consider that the profit included in the producer price must provide an incentive for the producer to increase and improve his supply. Otherwise the supply and its quality will decline. It is true that very many conditions must be met for the market to limit the producer price containing a reasonable amount of profit. For this we would need enterprises competing for the buyer's money, and also competing import. But these conditions are mostly lacking, and therefore we are compelled to limit producer prices by administrative means.

One of our most important objectives is to create a situation such that the producer price cannot exceed the import price. And this is not so easy to achieve. If we stop to think, the prices of many important products--for example, of electronic components or telecommunications equipment--now are substantially higher than their import prices. On the other hand, the prices of numerous products are lower than their import prices. Nothing could be more natural that for the producers of these products to bring their market prices closer to the import prices. This would be in order, if simultaneously the domestic price level were reduced of the products exceeding their import prices. But since this latter trend can unfold in the near future only to a limited extent for the mentioned reasons, we are forced to raise administrative barriers to the attempts to raise prices. It is true that we would like to dismantle these barriers as soon as possible, but this depends on when and to what extent we will be able to force the price-reducing trend by economic, market methods.

[Question] What rates of rise in producer prices do you forecast for the coming years?

[Answer] In the next few years I would expect producer prices to rise by 3 to 4 percent a year. If we convert this, but only this, to the consumer price level, then we get a rate of rise between 4 and 5 percent a year.

[Question] This, of course, is only the direct effect of the rise in producer prices. But the consumer price level is influenced also by other factors.

[Answer] That is correct. One such factor, for example, is the warranted reduction of consumer price subsidies. This work has to be continued, because only a price that reflects objective value relations can serve as a guide for consumer and producer alike. In recent years, the dismantling of price subsidies contributed 2.5 to 3 percentage points to the consumer price level's annual rate of rise. We have relatively wide leeway in choosing the rate at which we are dismantling the price subsidies: this rate can be reduced or increased. The important thing is that the dismantling of subsidies must be continued, although the rate at which it is being done can be slowed down if necessary. This also means that to the 4- to 5-percent annual rate of rise mentioned above we must add the effect of the rate at which the price subsidies are being dismantled.

[Question] Where are we now in dismantling the consumer price subsidies?

[Answer] We are approximately more than halfways through.

[Question] The development of consumer prices is inseparable from the development of wages and incomes.

[Answer] Actually the development of real wages and real incomes is a fundamental question of social policy. Real wages will not decline this year, and we regard this as an accomplishment. The planning of real wages and the price index for 1986 has now reached its intensive stage. We know that the smallest possible price index would be desirable from a certain point of view, but price policy cannot be derived solely from the development of the price index. For an artificially reduced price index perpetuates the structure and slows economic growth. And this also slows the growth of real wages and real income. No one can deny that price policy, too, has contributed to the development of supply and to its relatively high quality.

[Question] Don't you think that the process of inflation reflects also the low efficiency and lack of organization in production and distribution, the worsening terms of trade, and the support or maintenance of uneconomic production?

[Answer] Most certainly! Had the producer prices, responding to some external ban, not risen at all or only much slower than their rate of rise to date, the financing of uneconomic or not sufficiently economic activities would have required additional budgetary grants. And we would have had to provide the money for this from somewhere or other. Thus inflation in our country stems from structural causes, respectively from structural disequilibrium. Incidentally, inflation cannot be equated with the rise in prices that the consumer price index reflects, neither in Hungary nor in the neighboring countries. For inflation has also latent manifestations: shortages, deterioration of quality, sacrificing a minor or major part of one's leisure time to find and buy commodities, corruption, etc.

Cost increases due to structural and efficiency-related causes are present in the Hungarian economy as well. The only question is: When and how much of

these cost increases do we allow, on the basis of various considerations, to be reflected in the prices, and how much do we finance by other means: through subsidies, exemptions, etc. Admittedly this, too, requires money, and taxes must therefore be raised. But a tax increase will exert inflationary pressure sooner or later, and therefore the vicious circle cannot be broken in this manner.

[Question] Does this mean that if latent inflation were to become open, the rise in prices reflected by the price index would be greater than at present?

[Answer] Yes, because even up to now we have set strict barriers against attempts to raise prices. But I think that in the future it will be possible to gradually slow down the rise of the price index.

[Question] How can this be achieved?

[Answer] Only if also the agencies managing the economy conform to the modernization of the system of economic management and treat more consistently the economic units whose performance is poor, and if they prevent also in this manner the economic units from passing on in their prices the costs of shoddy and wasteful work.

[Question] This is rather difficult, because very often major or minor monopolies confront the public administration agencies. And the experts at the enterprises are asking how to interpret unfair pricing or abuse of power within the organizational structure of monopolistic or oligopolistic enterprises.

[Answer] This is specifically why the government is urging changes in the present organizational structure. As FIGYEL0 too has reported, we will be aiding organizational changes in 1985-1986 also with financial resources. We would like to achieve a dilution and weakening of the organizational and production monopolies, so as to provide more opportunity for growth and wider freedom of action for the economic units that have become independent. All this will be done in the spirit of developing the market. And this is why we would like to avoid pseudomeasures such as the wide-scale formation of subsidiaries, for example. We are urging the establishment of enterprises that are really independent in a legal and economic sense, and we will examine also the financial conditions for the establishment of additional small enterprises.

[Question] Numerous decisions can be expected that will closely influence the enterprises' operations. Will the enterprises be able to prepare for the changes in due time, to avoid subsequent "surprises" of the kind they have been experiencing this year?

[Answer] We have prepared a program for the further tasks in conjunction with perfecting the system of economic management. According to this program, we will strive to adopt by this summer the decisions regarding the price and regulator changes that will become effective as of 1986, and to make these decisions public by autumn. The Hungarian Chamber of Commerce and the cooperatives' national federations are participating in the preparations for the adoption of these decisions.

POLAND

PZPR THEORETICAL ORGAN RUNS SPECIAL ISSUE ON ECONOMIC REFORM

Warsaw ZYCIE WARSZAWY in Polish 7 Mar 85 p 6

/Article by (mi): "NOWE DROGI Writes About Economic Reform"/

/Text/ A special edition of NOWE DROGI is wholly devoted to the economic reform as evaluated by the administration and the Sejm. First is a report on the realization and results of the reform in 1983 that was accepted by the Council of Ministers in June 1984. The report was commented on by the Socio-economic Council in the Sejm on 17 September 1984.

NOWE DROGI has published the text of this discussion and the opinions of the Council and the Sejm Advisory Group, with comments by the government plenipotentiary for economic reform. There is also, published for the first time, a speech by Wojciech Jaruzelski given at the meeting.

The realization of the economic reform was the object of the Sejm evaluation at the meeting in October 1984. NOWE DROGI publishes a report by the Commission for the Economic Plan, Budget and Finance and the Commission for Legislative Work on the realization of the reform and the Sejm resolution on this matter. Also, there are fragments of speeches by several deputies on the subject of economic reform.

12411  
CSO: 2600/703

POLAND

## PLANS OF FOOD INDUSTRY FOR 1985 ANNOUNCED

Warsaw ZYCIE WARZAWY in Polish 8 Jan 85 pp 1-2

[Article by (mp): "The Same Amount of Meat--Considerably More Flour, Cereals and Macaroni--The Arrival of Fats"]

[Text] What can we expect from the food industry? What will we eat? What will be lacking? What will be in abundance? The answers to these questions could have been heard during Monday's deliberations which dealt with a subject that would arouse the Sacred Ibis: "The Tasks of the Food Industry Enterprises in Ensuring the Implementation of the 1985 Plan."

The directors of enterprises and associations, trade unionists and self-government representatives met at the Ministry of Agriculture and Food Economy and familiarized themselves with the tasks of the Central Annual Plan in this industry.

What will there be a shortage of? It is not difficult to guess. Even though an improvement is being noted in animal husbandry, we only have indications that this is so. As the plan shows, as increase in purchases only means a reduction in meat imports. Overall, 1.455 million tons of meat and pork will make it to the market; this is not much larger than last year's supplies (1.440 million tons).

There should be enough of other food items, even though it will not be easy to talk about surpluses. Thanks to the good rape harvests, deliveries of oils and plant oils should increase by 13.5 percent. The fall and also the December figures indicate that a considerable increase in production will require the utilization of all this industry's assets. More animal fat (more than 9 percent) should also find its way to the market.

Sugar production should also whet our appetites, especially since they have been reduced by higher prices. There are plans for the processing of 1.780-1.800 million tons of sugar, i.e., just a bit more than last year's production. Sugar processing facilities will turn about 7,000 more tons of sugar than last year. Since the experts believe that it would take 25,000 more tons of sugar to satisfy the public, the food industry is pinning all its hopes on mobilizing a new caramel producing line at the 22nd of July and E. Wendel facilities. If this does happen, we will be able to ruin our teeth to our heart's content. If not, we will be healthier.

As before, there will be shortages of chocolate. Its production and the processing of so-called chocolate products will grow by 2 percent.

There should be considerably more flour, cereals and macaroni this year as opposed to last year. The plan envisions a production of 3.850 million tons of flour (an increase of more than 8 percent or 25 percent more than last year) and 115,000 tons of macaroni (29 percent more).

No less important (and sometimes more important) will be the improvement in product quality. Unfortunately, past observation indicates that there is much to do. We still do not see a noticeable improvement in the quality of pork, flour, macaroni, jellies and jam. Although the number of complaints on the part of the public is small, about 1 percent, shoppers know quite well what the quality here is like.

The wholesome quality of these products is also important. The minister of health and social welfare is amending the current regulations and requirements placed on many products.

12247  
CSO: 2600/710

POLAND

## DISSIDENT ECONOMIC ANALYSIS DRAWS SHARP RETORT

Warsaw TRYBUNA LUDU in Polish 4 Mar 85 p 3

/Article by Krzysztof Krauss: "Lies, Silence and the Facts" /

/Text/ Having occasionally perused the products of frustrated journalists who, after 1981, have had a "miraculous vision" and now appear on the pages of publications which are very far from their past views and in other so-called unauthorized publications, in foreign broadcasts, in underground radio, as representatives of the so-called opposition in the Western press, I did not think that there could be anything that would astonish or surprise me.

But then through the mail a "document" arrived, which after being read by anyone who has retained at least some common sense and the ability to judge facts objectively, would raise the question, "Who is making a mockery and who is asking for directions?" This is a broad multipage elaboration entitled "On the Matter of Price Increases and the National Standard of Living--An Economic Analysis."

The authors, whose names are not listed, have decided on a pioneering achievement. They have decided to prove that the roots of the actual deep economic collapse lie in the actions taken since 1982, with the start of martial law. Speaking aside, from the rhetoric used in this paper it appears that the authors did "not notice" that martial law belongs to the past and was revoked as a result of the quick stabilization which occurred after only a year.

### The Last "Good" Year--1981

The last year, say the authors of the paper, that was "good" for the economy and for the living conditions of the populace (though they admit that it was not as good, as for example, 1979) was 1981, for two reasons.

First, at that time Solidarity came out with a "program of economic self-government and cooperation with the government for leading the country out of the crisis." Second, thanks to the position and activities of Solidarity, it was possible to use "the principles of profitability and social recompensation policy by raising prices while creating social protection for the poor."

What happened later, which was in essence the rejection of gradual evolution in the political-economic-social system in favor of a bold, as they stress, "exploitation of the supply possibilities which are hidden in the development of the cooperative and private sector" (that is, the restoration of capitalistic ownership concepts) and the abandonment of coercion through strikes, which forced continued raises and longer vacations at the price of limiting work time, etc., was in their view only "reaching bottom."

"The growth of prices and the decrease in real income which society has experienced--the level of real income is presently 20 percent lower than in 1981" write the authors of the "Analysis,"--was the price paid for the realization of the reform which in the future was to assure an improved standard of living for the population. This price has been paid but there is no basis to believe that it has been utilized for the benefit of the economy."

To prove that we are really dealing with "reaching bottom" the authors of the paper use the following figures. Here are some examples. For the purposes of comparison (100 percent) we use 1979, so in 1984 general consumption per inhabitant dropped to 89 percent, food consumption per inhabitant dropped to 85.5 percent, meat consumption to 79.9 percent, and real pay in the socialized economy fell to 83 percent.

Without going into a detailed verification of the data given in the "Analysis" we can summarize that it is a fact that the dimensions of production and consumption are, in most instances, lower than they were at the end of the 1970's. This is no "discovery," it is only necessary to look into the generally available official GUS /Main Statistical Office/ publications, the "Statistical Yearbook," the press, or take the trouble to become familiar with the reports issued by the Politburo and the speeches made at the plenary sessions of the PZPR Central Committee, the reports of the Bureau of the Government Plenipotentiary for Economic Reform, the evaluations of the Economic Advisory Council and the like. Moreover, in researching these data, I would like to add that I believe that it would be valuable to make some international comparisons.

Poland is not the only European country whose national produced income at the moment is lower than in 1978 (the last year before its dynamism was broken).

#### "Higher Driving School"

The authors of the "Analysis" declare that they are concerned only with a real honest "evaluation of present and future living conditions for society and of the methods for its self-defense in the face," as they say, "of the growing crisis." A minimum of honesty is required when speaking or writing about facts, to present them as they are. Please excuse the applicable expression, but it is a plain lie and a boldfaced falsehood not only to falsify the facts but to

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\*From Main Statistical Office data on which the authors of the "Analysis" supposedly base their conclusions, it is evident that the level of real income was 17.3 percent lower than in 1981 (the 20 percent is a "rounding off" done by the "creators" of the paper), but in 1982. Presently the difference is smaller by several points.

remove them from a context that is important to the interpretation of their meaning, or to use figures that are real but selected and presented so as to indicate a situation which is contrary to reality.

These are the tactics adopted by the authors of this "Analysis," but when they run out of concepts, such as manipulating data to turn "white" into "black," they do not scorn the less sophisticated technique of ordinary lying. Here are three typical examples.

The first concerns the matter of social benefits. "From 1982 the government has practiced a policy of limiting social benefits." From data that is easily found in the "Statistical Yearbook" it is apparent that social benefits have never had a higher participation in the whole of the population's income, not in 1981 or any other year, but in 1982. For example, the participation of monetary social benefits in the general total national income of the population in 1970 was 10.1 percent, in 1978 it was 15.8 percent, in 1980 it was 11.7 percent, in 1981 it was 12.2 percent, but in 1982 it was 17.5 percent and in 1983 it was 17.1 percent.

The second and third examples are connected with, as they phrase it, indicators of the "living standard," which also include life expectancy and infant mortality. They write that the worsening of these indicators since 1982 is a warning signal. The truth is as follows. The average life span for women since the middle of the 1970's is holding steady (women born during that time are, according to demographers, expected to have an average life span of over 75 years, 1 year longer than those born in the first part of the 1970's). Men, as is well known, have a shorter average life span, but those who were born in 1982 will, according to demographers, reach an average age of 67.2 years, and those born in 1980-81 have a life expectancy of 66.9 years. What about infant mortality, which was to rise at a frightening rate after the end of the "golden age of Solidarity"? For every 1,000 live births the infant mortality indicator stood at 20.5 in 1981, in 1983 it was 19.3.

#### When Does a Crisis Start?

Let us return to the basic method chosen by the authors of the "Analysis," their careful selection of facts, their omission of "uncomfortable" ones which do not support the idea that up to 1981, especially during 1980 and 1981, all was happy and cheerful, but that the suspension and the consequential dissolution of trade unions, including Solidarity, martial law and that which followed, pushed us into the deep and growing crisis.

The national income for division, which, among other things, indicates the quantity of consumption, is a derivative of the national produced income. The crisis does not start when consumption falls but when production falls, this is its beginning. The drop in consumption caused by the decrease in production nationwide can be delayed by various means. But if in a short time the causes of the production stoppage are not under control then a drop in consumption is inescapable, and generally the situation becomes worse if artificial methods are used to forestall it.

The authors of the paper, without going too far from the truth, write that the drop in consumption, as measured by the amount of national income devoted to this purpose, did not occur in 1980 or 1981. In truth the "consumed" income in 1980 was a little higher (by 2.1 percent) than in the previous year, while in 1981 it fell by nearly 5 percent.

They state, "Only when prices were increased during martial law, when there was no organized opposition from Solidarity and it could not uphold the interests of the working people," was there "a drop in real income uncommon in Europe." This is presented with some thought, with cool calculation, because we learn in a later part of these conclusions that "poverty and shortages played out with premeditation in the current situation of power consolidation became the tools for building political submission."

The union of these conclusions is the following "practical" thesis on whose basis these considerations begin and end: "The process of pauperizing society can be only broken by an automatic mechanism of safeguards, a universal system for indexing pay and social benefits." One akin to the one, they say, that was sought by Solidarity.

In a while a few more words about what happened to the consumption which Solidarity was able to "protect" from the machiavellian moves of the authorities in 1980 and 1981. First a few facts which did not receive a single line in the paper that was called by its authors "An Economic Analysis." About the process and phenomena which occurred in production, the creation of national income, in the sphere of those economic phenomena which are the basis for all division of the material results of work.

#### In the Sphere of Production

The national produced income, in the scheme of the paper's authors, was in 1984 12 percent lower than in 1979. The authors cite dozens of indicators set up so as to bypass this indicator because it would be then necessary to explain the causes of the lower than now level in the produced national income, and the genesis of such a deep regression. At this point it would be difficult to use the authors' favorite, the "caesura" of 1982, as the reason for all the "misfortune," but they would have to use 1981 as the starting point.

From the graphic presentation which we have published /not reproduced/ it can be plainly seen when and how the production crisis grew, and how it was halted. The first, as compared with the previous year, drop in material production (of about 2.3 percent) happened in 1979 and is connected directly to the errors in the economic policy of the 1970's. But this was a drop that could be at least partially compensated for and could be eased and halted.

For example, from research done by Professor J. Gorski it is evident that if during the proper time we had decided temporarily to limit consumption by six to seven, percent, we would have seen a relatively rapid easing of the then forecast "inflationary gap," a beginning of the exit from the "debt trap" with the correct reforms in planning, management and supervision.

This view is confirmed by the economic results in the first half of 1980. During that time, in spite of the lack of a long-range concept for dealing with the impending crisis and the lack of decisiveness on the part of party leadership at the time to conduct a deep structural reform, it was possible to prevent a further drop in production. Industrial production, for example, rose above the level of the analogous period in the previous year by about 7 percent, production in the building-construction sector rose by 3.6 percent, etc. That the sum total for 1980 ended in another drop in the national income (by another 6 percent) was caused by the incidents which occurred in the second half of the year. For example, in industrial production the increase in the value of the production in the first half of the year over the results obtained in the previous year, in prices of the time 45.4 billion zlotys, was totally negated.

Using the justifiable social protest of the working class, the forces of the counterrevolution tried an open entry into the political arena. Through their inspiration and supervision a process of gradual dismantling of the entire economy, among other things, started. In the first stage it sought to limit effective work time and break the economic link between work and pay. The growing tide of strikes was utilized for this effect.

But this was but a foreshadowing of what was to happen in 1981. Strengthened, the political opposition started strike actions on a mass scale, blocking export, and weakening our ties with the CEMA countries. There was a further opening of the floodgates through which money with no coverage in anything of value flowed onto the market. It was not enough to take over the management of enterprises, the next step in the so-called Network Project was to manage the national economy.

With precise determination and premeditation industries vital to the economy were struck: coal mining, the steel mills, cement works, etc.

The results were obvious. Industrial production fell to the levels of 1974, housing construction to the level of 1967, export to the levels of 1974-1975. The produced national income was reduced to 88 percent of that in the previous year. The silence of the authors over this group of indicators is understandable.

#### Consumption in 1981

We have promised to answer the following question: "Why in 1981, in spite of the already advanced crisis, did consumption hold at a high level and then suddenly collapse in 1982?"

Consumption in 1981 was held on a level not much lower than in the previous year because everything that could be consumed was sent onto the market. Consumption finds were augmented by resources from that part of the national income for division which is normally reserved for development. The real dimensions of investment fell by 20 percent. Almost 10 percent of the entire consumption in 1981 came from the shifting of investment resources for the purpose of current consumption.

In spite of the catastrophic situation in the monetary balance and the tremendous national debt, 32 billion zlotys were borrowed (as converted to Polish currency) in the form of medium- and long-term credit and 82 billion zlotys in short-term credit from socialist countries, and 140 billion zlotys from capitalist countries. Reserves and stocks were stripped (in socialized enterprises to a total of 200 billion zlotys, and in market retail organizations to a total of 75 billion zlotys).

But this only gave the appearance of stabilization in consumption under conditions of collapsing production. The very shadow of a normal marketplace disappeared (with the exception of the market for fruits and vegetables).

#### Society Must Pay the Bill

It could not be otherwise, for the only "product" pushed without limit onto the "market" was money. The leaders of Solidarity replied to every, even the most timid, attempt to stem the flow of "unbacked" currency with one answer--strike.

Please look at the graph which shows the relationship of average pay and work effectiveness /not reproduced/. A situation like this never existed before--a 13 percent drop in work effectiveness (in industry) was accompanied by an increase in average pay of over 27 percent. The difference in the changes between work effectiveness and pay reached about 40 statistical points! This is the bill which had to be paid in 1982 in the form 100 percent price increases and hikes in the cost of living. This is the bill that Solidarity left not to the "authorities" but to society.

One must have total contempt for the readers' common sense to tell them that the painful price operation was "invested" by the "authorities" to distress and suppress society through economic worries which, say the authors of the "Analysis," was to become a passive, mindless, apathetic mass.

We are not surprised to find in this context, since such manipulations arise directly out of contempt for the reader, the linking of consumption in 1979 and 1984 with the suggestion that the lower level of current consumption is a "product" realized by the socioeconomic policy authorities. Only the conviction that they are dealing with an unthinking reader could create in the authors of the "Analysis" the view that no one will look in the generally available sources to see what is hidden in between those two distant dates, what facts and events.

This "middle" which was omitted by the authors, the period of consecutive years 1980-81-82-83, contains among other things the growth of consumption in 1983 by 5.3 percent as compared to the previous year, and about a 5 percent growth in 1984, making up 0.9 of the "hole" into which Solidarity pushed us through its activities.

Presently, the rebuilding of the consumption level from 1981 is not resting on the appalling stripping of the economy of whatever reserves, not on a deep deficit in foreign trade, not on further cutting of funds for future development,

but is based on progress in production, on the growing efficiency of industry and farming. Industrial production earmarked for the direct supply of the market has grown by at least 12 percent since 1981.

--There is still a rather painful double-digit inflation, but its rate has been reduced several times through price increases.

--One of the lasting factors having an effect on the systematic lowering of the inflation rate is the gradual limiting of the phenomenon of "overpaying" for the growth in work effectiveness, that is, the decrease of the growth in pay and the growth in work efficiency. For example, in industry we have gone from 40 statistical points in 1981 to 13 statistical points in 1984.

--Thanks to the speeding up in the growth in work effectiveness, in spite of the increase in economic rigors, from 1983 real pay has been rising systematically, though very slowly.

This is the true picture of the changes happening in the economy and in our material living conditions. It is getting harder to question the real facts. More often the "opposition" is left with only one way--conscious lies and falsehoods that differ from the truth even when they try to pick arguments in the form of cool and objective economic analysis.

12411  
CSO: 2600/703

POLAND

#### GOVERNMENT COMMISSIONS ANOTHER POLL OF FIRM EXECUTIVES ON REFORM

Warsaw RZECZPOSPOLITA in Polish 22 Feb 85 p 3

[Text] A total of 4,279 general managers of enterprises or their deputies (that is, roughly 60 percent of those in such positions) answered the questionnaire sent out by the Institute of Management Organization and Cadre Improvement concerning economic reform, as per order of the government plenipotentiary for reform.

The overwhelming majority of respondents (76.4 percent) expressed their support for the model and trends of the reform as defined in the decisions and documents of the Ninth PZPR Congress. However, notwithstanding the acceptance of the principles of reform that shows the majority of answers, they are divided and are often filled with considerable criticism of the progress of the process of reforming the economy and of the possibility of the proper operation on the part of enterprises.

Thus, about 65 percent of the executives polled are of the opinion that enterprises still have overly limited possibilities of action accordant with the principles of reform, and at the same time they declare good knowledge of these principles (about 81 percent), corroborating that they agree with the interests of enterprises (about 78 percent). A small percentage of persons queried think that reform already benefits society, whereas the predominant group (about 38 percent) states that reform will be of benefit before long, although a considerable portion (about 37 percent) also considers that its benefits will be noticeable and will be felt only in the more distant future.

What is the degree of the progress of reform in the opinion of the executives at large? Generally, it is admitted that reform has in many respects changed the way enterprises are functioning. More skeptical opinions prevailed in those parts of the questionnaire that concern the activities of the economic center. For example, to the question of whether the center, in accordance with the principles of reform, has already developed the effective methods of interaction with enterprises, about 24 percent answered positively, or somewhat, 56 percent answered somewhat negatively, or negatively, and about 19 percent expressed no opinion.

As regards the functioning of enterprises, about 75 percent of the executives are of the opinion that collaboration between representatives of the enterprise management and workers self-management is going well or will do so in the near future. Three-quarters indicate that improvements in the investment policies

of enterprises have already taken place, or will do so in the near future, although as to whether it is already in place opinions are divided. About 70 percent consider that within a few years technological progress will become a permanent motivating force of the activity of enterprises.

Respondents frequently voiced the opinion that in the enterprises reform has covered their management but not their departments and work stations. Some executives also pointed out the poor adjustment of the general principles of the reform to the specific conditions of their factories, whereas far from optimistic were opinions and outlooks on the subject of the possibilities of export expansion. Moreover, only every other executive considers that one can count on near-term improvement in the quality of production, which is alarming.

Which factors, in the opinion of the executives, delay the implementation of the reform? Are they primarily barriers of an economic nature or maybe of a social nature? Of greatest account are the latter, think the executives.

The main dangers facing the reform, of an economic and socioeconomic nature, in the opinion of the executives, are the great degree of monopolization in the economy, the social pressure to increase wages, which destroys market equilibrium (this is asserted by 60 percent of the respondents), and the complex of agricultural problems that have not been carried through.

Generally, it is certain that the executives are most optimistic not about what has been done but about the nearer or a more distant future.

1015  
CSO: 2600/655

POLAND

ECONOMICS TRAINING FOR REGIONAL CIVIL SERVANTS

Warsaw RZECZPOSPOLITA in Polish 8 Mar 85 p 4

/Article by (z): "Economic Education for Administrative Workers"/

/Text/ An understanding was reached between the Main Board of the Polish Economic Society and the Ministry of Administration and Land-use Management on the subject of raising the professional qualifications of field workers in the administrative agencies of the government and in enterprises which are under the jurisdiction of people's councils. The specialized training will first be given to the directorial cadre in agencies of community management and housing enterprises and to workers in the economic and financial/bookkeeping services.

REZCZPOSPOLITA has obtained the following statement from Waclaw Kluczynski, undersecretary of state in the Ministry of Administration and Land-use Management.

"This understanding describes the principles, programs, and subject matter of specific training which concerns the implementation of the economic reform and the spread of economic knowledge. We would like this training to be a type of mental seed which would create a different outlook on existing economic solutions. We want to create conditions for our workers so that they may critically ponder the theoretical knowledge and then turn it into practical solutions.

"We are counting on the help of the Polish Economic Society activists especially in such scientific centers as Warsaw, Lodz, Wroclaw, and Poznan. We expect that the first courses will be starting sometime between the end of March and the beginning of April in the current year."

12411  
CSO: 2600/703

POLAND

FARMERS POLLED ON OPINIONS ABOUT NEW TAX

Warsaw DZIENNIK LUDOWY in Polish 28 Feb 85 p 3

/Article by Janusz Bien/

/Text/ The new rules regarding the farmers' tax have gone into effect. What do the farmers think about this? What results are expected? What intentions do they have? These questions were posed by television, radio and press reporters. But the answers are random, depending upon who is asked. Sooner or later, only the opinions can be put to the public awareness.

However, we can acquire a more exact commentary on the general view. These are polling devices used in many countries, based upon mathematical methodology. They begin by choosing a group of people who represent the entire society. If the groups are well chosen and we receive answers, for example, that are 80 percent "yes" and 20 percent "no," then even if we increase the size of the group, the 80:20 ratio will not change.

The correctness of this assertion has been shown many times. In Poland, the Main Statistical Office /GUS/ has conducted polls, not to mention the Center of Public Opinion Research /CBOS/. Our inquiries have one serious flaw: the cost is high when working with the statistics for a very long time. The views derived in the original research can change in the interim.

This also can happen in the research among the farmers on the new tax. The inquiry of CBOS was introduced in April and May 1984. The tax rules had been known for a long time, but the entire matter was yet far into the future. The burden of everyday problems is touchy enough in Poland and it is difficult to think about the future. This is why many answers were "I don't have any opinion."

I have presented the research methods in such a long and exhausting manner that the doubting reader has asked: "How do you know this?" I know this from the polls. I believe them to be honest and the results--even though there are many numbers--are more interesting than the answers given by random passerby into a microphone.

## Television, Radio, Neighbors and We

The poll showed that at first, 8 months before the introduction of the tax, 47 percent of those polled did not have any idea about the tax's assumptions or how to calculate it. Of the remaining persons, 45 heard about the tax from television, 35 from the radio, 33 from neighbors, 26 from the press, 18 from the agricultural service, and 3 from a special pamphlet (the numbers mean percentages, which added together exceed 100 as some responses were double).

The farmers were then asked about the future:

- how large of a tax are they willing to accept if they own their own farm?
- how do they plan to farm after introduction of the tax?
- what do they think about the behavior of other farmers?

The answers were placed into a few categories. The most important ones were: how old were the interviewed people, their education and the size of their farm? The latter question was divided into four groups: up to 2 hectares, from 2 to 5 hectares, from 5 to 10 hectares and over 10 hectares.

As regards the tax measure, 61 asked persons agreed to accept up to 1.5 q of rye from each hectare, 15 from 1.5 to 2 q, 6 at over 2 q and 14 did not have any opinion on the subject. Nobody in the world likes taxes. Therefore, it is worth noting the relatively high degree of acceptance of the increased tax. After all, even the lowest proposal was three times higher than the rates existing before the changes.

## "It Is Important, What Is Mine"

It is also interesting to look into the future and see the resulting differences, whether or not the farm is private. The polled persons feel that 21 other farmers would quit farming as a result of the higher taxes, but only 13 said that of themselves. About increased production, the response was 24 and 26 farmers; about increased hectarage, 9 and 12.

We can see a small amount of optimism in these numbers. One can say the following from this: "Others may not make it, but I will somehow make it."

The age of the farmers clearly influences their thinking and plans. The younger farmers plan at a rate three times higher than the older farmers to increase their farms and the production. We can understand this. But different opinions can be found among the youth. It appears that a large share of the youth are healthier and more optimistic.

A similar correlation can be found between the educational level of the polled individuals and their declaration as to retention of the farm after the introduction of the higher taxes. And here there was three times more interest in retention among the educated than among those who had only elementary education.

### Who Will Have It Better?

Users of smaller farms accepted the tax of 1 q per hectare less often than owners of larger farms. The highest number (2.5 times) was found among those farmers who had more than 10 hectares of land as compared to those who had the least amount of land.

As regards the question of eventual tax relief, 83 said they knew nothing about it. In their own views, reasons for granting tax relief included:

- natural disasters;
- difficult situations in life and misfortune;
- new investment and modernization of the farms;
- taking over of a farm by a young person;
- having a farm in an inferior region of the country with poor soil conditions, unfavorable climate and bad location.

These proposals had been the same as the intentions of legislators. And now some personal comments. I learned the journalist's trade from that pillar of the agricultural press, Mr Wladyslaw Dunin-Wasowicz. He often said that the reader cannot tolerate in an article more than three numbers, including the manuscript's pages. I have always tried to maintain this principle, but today I have broken it many times over. Why?

I think that the time in which we live now can be best expressed in those numbers.

9807  
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YUGOSLAVIA

CHANGES IN FOREIGN EXCHANGE ALLOCATION LAW, 1985

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 14, 22 Mar 85 p 615

[Excerpt] In the decision on allocation of foreign exchange for use by organs of the Federation in 1985 (SLUZBENI LIST SFRJ, No 5, 1985) in Point 1, paragraph 1 in the prescription under 1) the number 15,139,432,000 should be changed to 16,044,609,000, and in the prescription under 2) the number 103,055,777,000 should be changed to 103,037,027,000.

In paragraph 2 the number 3,240,539,895 should be changed to 2,334,112,895.

In the distribution of foreign exchange for 1985 which is an integral part of the Decision on Distribution of Foreign Exchange Established for Use by Organs of the Federation and for Achieving the Rights and Duties of the Federation in 1985, No 61 and No 62 should be added after No 60, as follows:

61. Tourist Association of Yugoslavia

Invisible payments:	
official travel	206,000
representation	144,172,000
other payments	303,779,000
Total	448,157,000

62. Economic Chamber of Yugoslavia

Invisible payments:	
official travel	4,275,000
representations	285,739,000
fairs and exhibitions	160,858,000
membership fees	2,210,000
other payments	3,938,000
Commodity payments:	457,020,000
Total	1,250,000

CSO: 2800/281-P

YUGOSLAVIA

PRIVATE, SOCIALIZED SHARE IN AGRICULTURE, 1962-1982

[Belgrade GLASNIK POLJOPRIVREDNE PROIZVODNJE, PRERADE I PLASMANA in Serbo-Croatian Feb 85 p 7]

[Excerpt]

	Socialized		(in percentage)	
	Sector	Private	Sector	1982
	1962	1982	1962	1982
Arable land	14	17	86	83
Livestock	9	14	91	86
Income [in agriculture]	15	25	85	75
State purchase of agricultural products	40	45	60	65

CSO: 2800/281-P

YUGOSLAVIA

'OOUR'S' CRITICIZED; CHANGES IN ASSOCIATED LABOR LAW DISCUSSED

[Editorial Report] An article in the 23-25 March 1985 issue of PRIVREDNI PREGLED (Belgrade, page 11) says: "In the last few months it has become popular to proclaim the fragmented OOURs (basic organizations of associated labor) as one of the basic causes of the present economic difficulties, and they have been rapidly eliminated even where they were clear assets to organization. At the same time another extreme has...defended them...even where it is obvious that they have become little 'enterprises' in themselves: showing no interest in cooperating with others within an existing work organization. As a result, the article said, particularly Articles 244 and 372 of the Law on Associated Labor are now under scrutiny and changes are being proposed within the Federal Council for Questions of the Social Order to force OOURs toward more integrated operation, i.e., through eliminating their own bank accounts, placing them in a more subordinate position within work organizations, and forbidding the formation of management organs in OOURs, "many of which now exist and are almost identical to those on the level of the work organization [RO] or composite organization of associated labor [SOUR]."

Like other organizational forms in associated labor, the OOURs were expected "to pool labor and resources and contribute to an integrated economy." The above economic daily (9-11 February 1985, page 5) says the following in this regard: "In Serbia, which can serve as an example for the situation in the country, only 7.56 percent of all OOURs are associated outside their own region. The situation is similar in other republics and provinces, and indeed under the 'cap' [of the OOURs] can be found a large number of reasons why the unified Yugoslav market is not functioning. Hence it is not strange that the question of strengthening ROs is being raised more and more often.

"Changes in the organization of associated labor are more intensive in Serbia than in other parts of the country. At the end of 1983 there were 210 OOURs from other republics or provinces linked with work organizations in Serbia, which is only 1.02 percent of the total number of OOURs in Yugoslavia. At the same time there were only 83 Serbian OOURs associated in work organizations from other republics and provinces; or only 1.84 percent of all OOURs in Serbia. The Higher Economic Court of Serbia concluded that on 1 September 1984 there were only 339 OOURs linked with work organizations outside their [local] regions, or only 7.56 percent of

the total number of OOURs in Serbia." The Court also concluded that the linkage of OOURs within ROs or SOURs is very loose and merely formal in most cases, often resulting in duplication of work and unfair competition in the marketplace.

"It very often happens that OOURs which cannot exist independently associate with others but retain complete independence to operate on the domestic and foreign market. At the end of 1983 there were 13,193 enterprises [of all forms] in Serbia, or 23 percent of the country's total; and of this number 4,520 were OOURs. Reflecting the tendency throughout the country, in Serbia in the last 3 years the number of work organizations with OOURs declined by 42, while the number of OOURs declined by 357 and the number of work organizations without OOURs increased by 113."

(An article in OPREDJELJENJA (Sarajevo, Dec 1984, pp 36-37) reported that at the end of 1983 the number of OOURs throughout Yugoslavia totaled 20,519, work organizations without OOURs 13,961, work organizations with OOURs 4,356, SOURs, 425, and work communities, 5,218.)

PRIVREDNI PREGLED, noting how difficult it is to change the status of an OOUR since it requires a consensus decision by OOUR members, said "it often happens that 10 or 15 people who make up an OOUR can block the whole process and, in preserving their own positions, make it impossible for the majority to improve the organization and efficiency of operation."

An article in the 17 January 1985 issue of PRIVREDNI PREGLED (page 2) said: "Research in several large ROs and SOURs in Serbia have clearly shown the defects in organization of the economy because of excessive autonomy of OOURs.... In the [past] drive to create new self-management organizational forms, there was too much action aimed toward strengthening the parts (OOURs), while neglecting the whole (the RO).... There are at present no mechanisms to protect the whole against the parts, so in practice one small OOUR can block the decision of an RO or SOUR employing several thousand workers. Laws and regulations enacted after the Law on Associated Labor have also strengthened the basic parts at the expense of the whole..., encouraged the formation of inefficient auxiliary services and reduced efficiency of operation."

In the recent discussions on changing the economic planning system (Belgrade EKONOMSKA POLITIKA 11 February 1985, p 10) Pavle Bogetic, president of the scientific section of the Association of Economists of Yugoslavia, among others, noted the need to seek "a higher level of associated labor." Borisav Srebric said in agreement, "The management of modern production forces cannot be reduced to the OOUR. While no one negates the right of OOURs to dispose of income, the planning mechanism must primarily provide for the development of production forces, while other [ideologically oriented] segments of the economic system define the position of OOURs. Therefore every insistence [on the fact] that the whole of development should be administered from the OOUR would mean negating

the development of production forces, above all technological development, because the range of the OOUR extends [only] to reproducing that which exists," while total development is irrelevant to it. Srebric said, "By law we cannot oppose the fragmented OOURS--our task is to overcome the OOURs through development."

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